

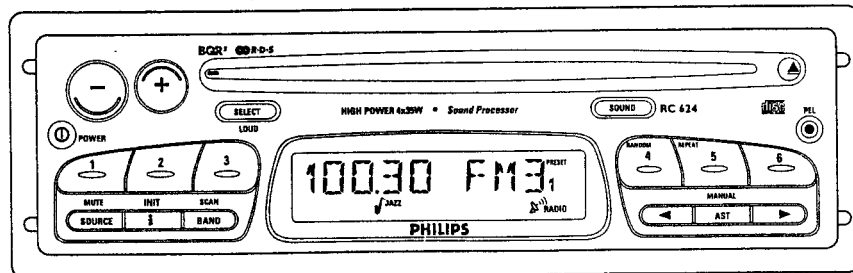
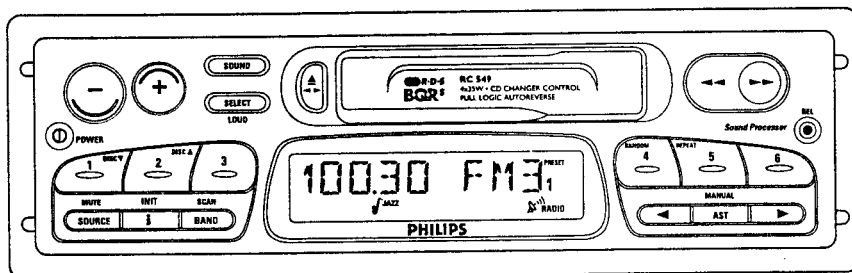
Cassette Car Radio 22 RC 604/00/17
22 RC 624/00/17
22 RC 519/00
22 RC 549/00

Service Manual

For repair information of the cassette deck see Service Manual of Auto cassette deck SCA-R3.3 (4822 725 25481)

For repair information of the CD player see Service Manual of CD mechanism CDM-M2-1.1.(4822 725 25483)

12 V 



Technical Specifications

General

Power Supply	:	10.5 - 16V
Quiescent Current (at 12.6V)	:	< 4.0mA
Fuse	:	10A

Radio

TUNING RANGE IN DIFFERENT "INIT" MODE

INIT MODE	BAND	FREQUENCY	GRIDS MANUAL/AUTO
EUROPE	FM	87.5 - 108MHz	50kHz/100kHz
	LW	144 - 288kHz	1kHz/1kHz
	MW	531 - 1629kHz	1kHz/9kHz step
AMERICA	FM	87.5 - 108MHz	100kHz/100kHz
LATAM	AM	530 - 1710kHz	1kHz/10kHz step
ASIA	FM	87.5 - 108MHz	50kHz/50kHz
	MW	531 - 1629kHz	1kHz/9kHz step

Aerial input impedance	:	75 ohm
IF-FM (1/2)	:	10.7MHz/72.2MHz
IF-AM(1/2)	:	10.7MHz/450kHz
α - 3dB	:	7 \pm 5 μ V
SDS (10 dB channel separation)	:	150uV \pm 3dB
Stereo channel separation	:	> 21dB
FM sensitivity for 26dB S/N	:	< 4.5 μ V
MW sensitivity for 26dB S/N	:	< 30 μ V
LW sensitivity for 26dB S/N	:	< 38 μ V

Cassette Deck (RC549/519 ONLY)

Number of tracks	:	2x2
Tape speed	:	4.76 cm/second +3% -1%
Wow and Flutter	:	< 0.30%
Crosstalk	:	> 40dB

CD player (RC624/604 ONLY)

CD mechanism	:	CDM-M2-1.1
Frequency response	:	30Hz - 16kHz
Crosstalk	:	55dB

Amplifier

Output Power (D=10%)	:	4x16W \pm 1dB/4 Ω
Fader	:	60dB
Balance	:	60dB

ESD



WARNING

All IC's and many semiconductors are susceptible to electronic discharges (ESD). Careless handling during repair can reduce life drastically.

When repairing, make sure that you are connected to the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

ESD Equipment:

Anti-static table mat	large 1200x650x1.25mm	4822 466 10953
	small 600x650x1.25mm	4822 466 10958
Anti-static wrist band		4822 395 10223
Connection box (1M Ω)		4822 320 11307
Extendible cable (to connect wrist band to conn. box)		4822 320 11305
Connecting cable (to connect table mat to conn. box)		4822 320 11306
Earth cable (to connect any product to mat or box)		4822 320 11308
Complete kit ESD3 (combining all above products)		4822 310 10671
Wristband tester		4822 344 13999

INSTALLATION

If your car is equipped with ISO connectors, simply insert them in connectors of the car radio. If not, you can use an adaptor cable (Refer to the table on the separate installation card).

PREPARATION

Voltage and polarity: The set must be connected to a 12V car battery with negative terminal to earth (car chassis).

Warning: To prevent short-circuiting, disconnect the negative car battery terminal until the set has been mounted and connected (fig.1). See separate installation card.

CONNECTOR A (fig.2)

Recommended Power supply connections

- **Red lead A7:** Connect to a switched 12V supply (switched on/off by car ignition).
- **Yellow/red lead A4:** Connect to a permanent 12V supply.
- **Brown lead A8:** Connect to earth (car chassis).

Alternative Power supply connections for ON/OFF LOGIC (see illustration on separate installation card for correct connection).

- **Red lead A7:** Connect to a permanent 12V supply.
- **Yellow/red lead A4:** Connect to a switched 12V supply (switched on/off by car ignition).
- **Brown lead A8:** Connect to earth (car chassis).
- See INITIAL SETTINGS; select Option 'LOGI' and set the Choice to 'ON'.
- The ON/OFF LOGIC feature enables use of the set (for one hour) after you have removed the car ignition key.
- The ON/OFF LOGIC feature in this set functions only if your car has been prepared for it (e.g. certain VW and Opel/Vauxhall cars). Consult your car service manual or check with your dealer to confirm this.

Others connections (fig.2)

- **Pink lead wire** (Telephone mute): If your car telephone provides a mute signal, it can be used to automatically interrupt the set's audio output.
- Connect the telephone mute wire to Pink lead wire (TEL. MUTE).
- See INITIAL SETTINGS; select Option 'PHONE' and set the Choice to 'LO' or 'HI' according to phone type.

- **Blue lead A5** (Automatic Aerial): This radio can provide a 12V signal for the control of an automatic motor aerial or the supply of an electronic aerial by connection. Do not use this connection for the supply lead of the aerial motor!
- **Orange lead A6:** Connect to a 12V supply. When the car headlamps are switched on, the rotary knobs of radio are illuminated (even when the radio is switched off).
- **Line-output ***
 - You can connect a power amplifier (with 2 or 4 additional loudspeakers) to this set with the RCA cable.
 - Connect Red socket to Right channel and white socket to Left channel.
 - Connect Blue wire to Amplifier Remote on/off.

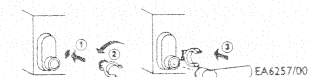
CONNECTOR B (fig.2)

- **Loudspeakers** (use 4 ohm loudspeakers only)
 - Do not connect any of the loudspeaker leads to earth or directly to a booster/amplifier.
- **Connecting 4 loudspeakers**

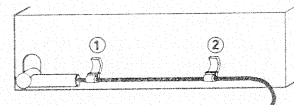
	Front	Rear
Left+	Green [B5]	White [B7]
Left-	Green/black [B6]	White/black [B8]
Right+	Grey [B3]	Blue [B1]
Right-	Grey/black [B4]	Blue/black [B2]

AERIAL

Fix antenna adaptor* (EA6257/00) if needed.



Insert aerial plug into aerial socket (good reception is only possible with a good aerial). (Optional) Secure the aerial wire with cable tie.



CONNECTOR C *

- **CD changer** (fig.3): You can connect (see mounting instructions for the CD changer) the following CD changer (D'B type) to this set:
 - RC032
 - RC026/00
 - RC026/50, order new cable EA6263
- **Portable player** (fig.4): You can connect a portable DCC, CD or cassette player to this set (instead of a CD changer) to this set. Use the cable (EA6786) mentioned in the illustration. The cable must be connected to an output of 750mV (in most cases the headphone output of the portable player is suitable).
- Refer to INITIAL SETTINGS; select Option 'SRC' and set the Choice to 'AUX'.
- This indicates to the set that a portable player is connected instead of a CD changer.
- Increase the volume of the portable player to desired level.

CONNECTOR D

- **Philips Remote Control EA2001** (fig.2): You can connect a Philips remote control (EA2001) to this set (see mounting instructions for the EA2001).

REAR STUD

Screw rubber buffer E onto fixing stud at rear of set.

MOUNTING

METAL SLEEVE (fig.5)

- Install the metal sleeve (dimension 182x53 mm) in the dashboard.
- Fix metal sleeve into place by pressing the metal tags outwards using a screwdriver.

MOUNTING RADIO

This radio can be properly installed either from conventional Front Mounting or Rear Mounting.

FRONT MOUNTING

- Slide the radio into the metal sleeve until the springs at either side of the radio snap into the openings of the sleeve (fig.6).
- Finally reconnect the negative car battery terminal (fig.7).

REMOVING RADIO (using the two U-brackets supplied)

- Insert both U-brackets into the holes on the front of the set until they lock. Pull out the radio (fig.8).

REAR MOUNTING (fig.9)

- Remove the trimplate around the front panel and the side springs.
- Select a position where the screw holes of the mounting bracket and the screw holes of the radio become aligned and tighten the screws at 2 places on each side.
- Only use M5 screws that are not longer than 6mm.

REPLACING FUSE (Fig. 2)

- Use a 10A blade-type fuse.

* only for certain versions

3

SECURITY

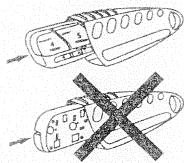
For theft protection this set is provided with the following security features:

DETACHABLE PANEL

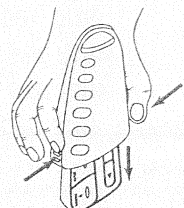
- Take the detachable panel with you when leaving the car.
- Remove the panel by pressing the REL button.



- Keep the detachable panel in its protective box which can be used as a key chain.



- Always replace the detachable panel before starting to drive.
- To release the detachable panel from the protective box.

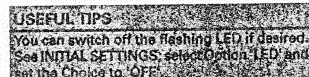


- Replace the panel starting with the left-hand side of the set. Then push the panel until it clicks into position.



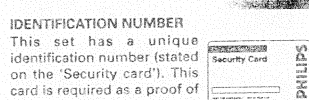
SWITCHABLE WARNING LED

- The LED flashes when the detachable panel is removed.



SECURITY WARNING STICKERS

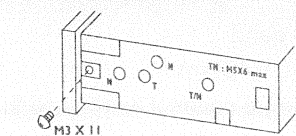
- Stick the supplied 'Security' warning stickers on your car windows.



IDENTIFICATION NUMBER

This set has a unique identification number (stated on the 'Security card'). This card is required as a proof of ownership when the set is stolen, when the detachable panel is lost or when requesting service.

- Remove the 'Security card' before installing the set. Do not keep the 'Security Card' in your car.



* only for certain versions

4

INITIAL SETTINGS

It is possible to modify many of the set's initial settings according to your preferences.

- Press the INIT key for at least 2 seconds (until you hear a beep) to enter the Initialisation mode. The display shows 'INIT'.
- Briefly press < or > key to select the option you want to modify.
- Briefly press the AST key to adjust the chosen option. The choice shown on the display will be memorized by the set when you select another option or leave the Initialisation mode.
- Press the INIT key for at least 2 seconds (until you hear a beep) to leave the Initialisation mode.

Note: The set automatically leaves the Initialisation mode about 1 minute after your last operation.

Option	Choice	Usage
(< or >)	(AST)	
COLOUR	[G, O]	Select the desired display colour: Green or Orange.
TIME *	[OFF, 12H, 24H]	Select desired clock format. (See 'SETTING THE CLOCK').
SRC *	[CDC, AUX]	Source connected to Connector C <ul style="list-style-type: none"> - Select 'CDC' for a Philips CD changer (D'B type); - Select 'AUX' for a portable audio player.
REMOTE	[N, Y]	Select 'Y' to connect a Philips remote control (EA2001).
PHONE	[NO, LO, HI]	Select 'LO' or 'HI' according to phone ('LO' is most cases). See 'PREPARATION', 'OTHERS CONNECTIONS' to connect phone. Select 'NO' if no phone is connected.
BLEEP	[-2, -1, 0, +1, +2]	Select volume level of confirmation beeps.
LOGI	[OFF, ON]	Select ON to limit the use of the set to one hour when the car ignition is switch off. See 'PREPARATION', 'CONNECTOR A'.
LED	[OFF, ON]	Select OFF if you do not want the LED to blink when the front is removed.
LOUD	[LOW, MID, HI]	Select the level of loudness control.
TAPE	[-2, -1, 0, +1, +2]	Volume level of TAPE relative to tuner.
CDC* or AUX*	[-2, -1, 0, +1, +2]	Volume level of CD changer or AUX input relative to tuner.
TA	[-2, -1, 0, +1, +2]	Volume level of Traffic Announcement, News bulletins and Alarm messages relative to tuner.
SRCH	[DX, LO]	Select 'LO' if you wish to search only for strong stations during automatic tuning to a frequency).
AF	[OFF, ON]	Select 'OFF' to prevent the radio from returning to Alternative Frequency.
RADIO	[EUROPE, LATAM, AMERICA, ASIA]	Select the tuner according to European, Latin America, America or Asia standard.
MW	[OFF, ON]	Select 'OFF' to suppress MW if not in use (only applicable when RADIO is in European standard).
AM	[OFF, ON]	Select 'OFF' to suppress AM if not in use (only applicable when RADIO is in Latin America, America or Asia standard).
LW	[OFF, ON]	Select 'OFF' to suppress LW if not in use (only applicable when RADIO is in European standard).

Note: Reference volume can be preset by the volume up or down keys during the Initialisation mode.

* only for certain versions

6

2

2-1

INSTALLATION

If your car is equipped with ISO connectors, simply insert them in connectors of the car radio. If not, you can use an adaptor cable (Refer to the table on the separate installation card).

PREPARATION

Voltage and polarity: The set must be connected to a 12V car battery with negative terminal to earth (car chassis).

Warning: To prevent short-circuiting, disconnect the negative car battery terminal until the set has been mounted and connected (fig.1). See separate installation card.

CONNECTOR A (fig.2)

Recommended Power supply connections

- **Red lead A7 :** Connect to a switched 12V supply (switched on/off by car ignition).
- **Yellow/red lead A4 :** Connect to a permanent 12V supply.
- **Brown lead A8:** Connect to earth (car chassis).

Alternative Power supply connections for

ON/OFF LOGIC (see illustration on separate installation card for correct connection).

- **Red lead A7 :** Connect to a permanent 12V supply.
- **Yellow/red lead A4 :** Connect to a switched 12V supply (switched on/off by car ignition).
- **Brown lead A8:** Connect to earth (car chassis).
- See INITIAL SETTINGS; select Option 'LOGI' and set the Choice to 'ON'.
- The ON/OFF LOGIC feature enables use of the set (for one hour) after you have removed the car ignition key.
- The ON/OFF LOGIC feature in this set functions only if your car has been prepared for it (e.g. certain VW and Opel/Vauxhall cars). Consult your car service manual or check with your dealer to confirm this.

Others connections (fig.2)

- **Pink lead wire** (Telephone mute) : If your car telephone provides a mute signal, it can be used to automatically interrupt the set's audio output.
- Connect the telephone mute wire to Pink lead wire (TEL. MUTE).
- See INITIAL SETTINGS; select Option 'PHONE' and set the Choice to 'LO' or 'HI' according to phone type.

* only for certain versions

- **Blue lead A5** (Automatic Aerial) : This radio can provide a 12V signal for the control of an automatic motor aerial or the supply of an electronic aerial by connection. Do not use this connection for the supply lead of the aerial motor!
- **Orange lead A6:** Connect to a 12V supply. When the car headlamps are switched on, the rotary knobs of radio are illuminated (even when the radio is switched off).
- **Line-output ***
 - You can connect a power amplifier (with 2 or 4 additional loudspeaker) to this set with the RCA cable.
 - Connect Red socket to Right channel and white socket to Left channel.
 - Connect Blue wire to Amplifier Remote on/off.

CONNECTOR B (fig.2)

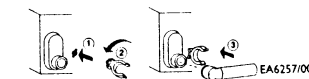
Loudspeakers (use 4 ohm loudspeakers only)

- Do not connect any of the loudspeaker leads to earth or directly to a booster/amplifier.
- **Connecting 4 loudspeakers**

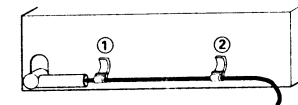
	Front	Rear
Left+	Green [B5]	White [B7]
Left-	Green/black [B6]	White/black [B8]
Right+	Grey [B3]	Blue [B1]
Right-	Grey/black [B4]	Blue/black [B2]

AERIAL

Fix antenna adaptor* (EA6257/00) if needed.



Insert aerial plug into aerial socket (good reception is only possible with a good aerial). (Optional) Secure the aerial wire with cable tie.



English

CONNECTOR C *

- **CD changer (fig.3) :** You can connect (see mounting instructions for the CD changer) the following CD changer (D'B type) to this set:
 - RC032
 - RC026/00
 - RC026/50, order new cable EA6263
- **Portable player (fig.4) :** You can connect a portable DCC, CD or cassette player to this set (instead of a CD changer) to this set. Use the cable (EA6786) mentioned in the illustration. The cable must be connected to an output of 750mV (in most cases the headphone output of the portable player is suitable).
- Refer to INITIAL SETTINGS, select Option 'SRC' and set the Choice to 'AUX'.
- This indicates to the set that a portable player is connected instead of a CD changer.
- Increase the volume of the portable player to desired level.

CONNECTOR D

- **Philips Remote Control EA2001 (fig.2) :** You can connect a Philips remote control (EA2001) to this set (see mounting instructions for the EA2001).

REAR STUD

Screw rubber buffer E onto fixing stud at rear of set.

MOUNTING

METAL SLEEVE (fig.5)

- Install the metal sleeve (dimension 182x53 mm) in the dashboard.
- Fix metal sleeve into place by pressing the metal tags outwards using a screwdriver.

MOUNTING RADIO

This radio can be properly installed either from conventional Front Mounting or Rear Mounting.

FRONT MOUNTING

- Slide the radio into the metal sleeve until the springs at either side of the radio snap into the openings of the sleeve (fig.6).
- Finally reconnect the negative car battery terminal (fig.7).

REMOVING RADIO (using the two U- brackets supplied)

- Insert both U-brackets into the holes on the front of the set until they lock. Pull out the radio (fig.8).

REAR MOUNTING (fig.9)

- Remove the trimplate around the front panel and the side springs.
- Select a position where the screw holes of the mounting bracket and the screw holes of the radio become aligned and tighten the screws at 2 places on each side.
- Only use M5 screws that are not longer than 6mm.

REPLACING FUSE (Fig. 2)

- Use a 10A blade-type fuse.

* only for certain versions

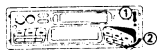
4

SECURITY

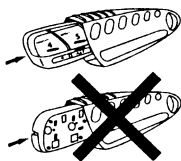
For theft protection this set is provided with the following security features :

DETACHABLE PANEL

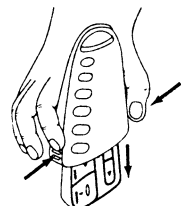
- Take the detachable panel with you when leaving the car.
- Remove the panel by pressing the REL button.



- Keep the detachable panel in its protective box which can be used as a key chain.



- Always replace the detachable panel before starting to drive.
- To release the detachable panel from the protective box.



- Replace the panel starting with the left-hand side of the set. Then push the panel until it clicks into position.



SWITCHABLE WARNING LED

- The LED flashes when the detachable panel is removed.

USEFUL TIPS

You can switch off the flashing LED if desired. See INITIAL SETTINGS; select Option 'LED' and set the Choice to 'OFF'.

SECURITY WARNING STICKERS

- Stick the supplied 'Security' warning stickers on your car windows.



IDENTIFICATION NUMBER

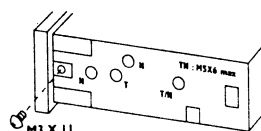
This set has a unique identification number (stated on the 'Security card'). This card is required as a proof of ownership when the set is stolen, when the detachable panel is lost or when requesting service.

- Remove the 'Security card' before installing the set. Do not keep the 'Security Card' in your car.



USEFUL TIPS

The detachable panel can be locked by a M3x11 screw.

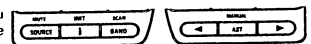


English

INITIAL SETTINGS

It is possible to modify many of the set's initial settings according to your preferences.

- Press the INIT key for at least 2 seconds (until you hear a beep) to enter the Initialisation mode. The display shows 'INIT'.
- Briefly press ◀ or ▶ key to select the option you want to modify.
- Briefly press the AST key to adjust the chosen option. The choice shown on the display will be memorized by the set when you select another option or leave the Initialisation mode.
- Press the INIT key for at least 2 seconds (until you hear a beep) to leave the Initialisation mode.



Note : The set automatically leaves the Initialisation mode about 1 minute after your last operation.

Option (◀ or ▶)	Choice (AST)	Usage
COLOUR	[G, O]	Select the desired display colour : Green or Orange.
TIME *	[OFF, 12H, 24H]	Select desired clock format. (See 'SETTING THE CLOCK').
SRC *	[CDC, AUX]	Source connected to Connector C – Select 'CDC' for a Philips CD changer (D'B type); – Select 'AUX' for a portable audio player.
REMOTE	[N, Y]	Select 'Y' to connect a Philips remote control (EA2001).
PHONE	[NO, LO, HI]	Select 'LO' or 'HI' according to phone ('LO' is most cases). See 'PREPARATION', 'OTHERS CONNECTIONS' to connect phone. Select 'NO' if no phone is connected.
BLEEP	[-2, -1, 0, +1, +2]	Select volume level of confirmation beeps.
LOGI	[OFF, ON]	Select ON to limit the use of the set to one hour when the car ignition is switch off. See 'PREPARATION', 'CONNECTOR A'.
LED	[OFF, ON]	Select OFF if you do not want the LED to blink when the front is removed.
LOUD	[LOW, MID, HI]	Select the level of loudness control.
TAPE	[-2, -1, 0, +1, +2]	Volume level of TAPE relative to tuner.
CDC* or AUX*	[-2, -1, 0, +1, +2]	Volume level of CD changer or AUX input relative to tuner.
TA	[-2, -1, 0, +1, +2]	Volume level of Traffic Announcement, News bulletins and Alarm messages relative to tuner.
SRCH	[DX, LO]	Select 'LO' if you wish to search only for strong stations during automatic tuning to a frequency).
AF	[OFF, ON]	Select 'OFF' to prevent the radio from returning to Alternative Frequency.
RADIO	[EUROPE, LATAM, AMERICA, ASIA]	Select the tuner according to European, Latin America, America or Asia standard.
MW	[OFF, ON]	Select 'OFF' to suppress MW if not in use (only applicable when RADIO is in European standard).
AM	[OFF, ON]	Select 'OFF' to suppress AM if not in use (only applicable when RADIO is in Latin America, America or Asia standard).
LW	[OFF, ON]	Select 'OFF' to suppress LW if not in use (only applicable when RADIO is in European standard).

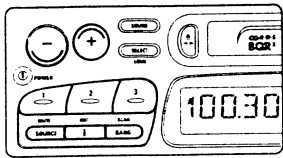
Note : Reference volume can be preset by the volume up or down keys during the Initialisation mode.

* only for certain versions

6

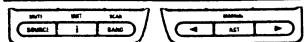
2-1

AUDIO ADJUSTMENT



- **POWER** : Press Power key to switch the set on or off.
- **VOLUME** : Press – key or + key to adjust the volume.
Please make sure you can still hear the traffic (thorns, sirens,)
- **SOUND** : Choose one of the predefined sound styles with the SOUND key.
- **BASS-TRE** : Your own settings of bass and treble.
- **FLAT** : Mid positions of bass and treble
- **JAZZ** : Jazz music
- **VOCAL** : Speech
- **CLASSIC** : Classic music
- **ROCK** : Rock music
- **SELECT** : Choose the desired audio mode with SELECT key.
- BASS (low notes), TREBLE (high notes), BALANCE (left-right), FADER (rear-front).
- Press – key or + key to adjust the selected audio mode. Adjustment of Bass and treble settings only applicable when 'BASS-TRE' is selected as the sound style.
- Note**: After 5 seconds the display goes back to the last mode of operation.
- **LOUD** : To reinforce bass and treble especially when listening at a low volume level. Press the LOUD key at least 2 seconds (until you hear a beep) to switch loudness on or off.
- **MUTE** : Press the MUTE key for at least 2 seconds to mute the sound momentarily. Press any key to restore the same volume level.
- Note**: The silent period may be interrupted by traffic announcements (if TA/NEWS is switched on).
- **SOURCE** : Briefly press the SOURCE key to select the desired source. The display shows: RADIO, TAPE or CHANGER * (AUX *).

SETTING THE CLOCK *



- Press INIT key for at least 2 seconds (until you hear a beep) to enter the Initialisation mode.
- Display shows 'INIT'.
- Press ◀ or ▶ key to select option 'TIME'.
- Press AST key to select '12H' or '24H'.
- Press ▶ key :
- Display shows e.g. '00:00' (24 hour format) or 'AM 12:00' (12 hour format).
- Hour digit start flashing.
- Press AST key to adjust Hour digit.
- Press ▶ key again :
- Minute digit start flashing.
- Press AST key to adjust Minute digit.
- Press INIT key for at least 2 seconds (until you hear a beep) to leave the Initialisation mode.
- 10 seconds after any key operations, the display will always show time when clock mode is activated.

USEFUL TIPS

- You can change the colour of the display.
- See INITIAL SETTINGS; select Option 'COLOUR' and set the Choice to 'G' (Green) or 'O' (Orange).

- Set functions but no sound?
- Adjust the volume of the set.
 - Adjust Fader Settings.

- Set mutes when you drive or display shows 'TEL CALL'.
- See INITIAL SETTINGS; select Option 'PHONE' and set the Choice to 'LO' or 'HI' according to phone type or 'NO' if no phone is connected.

- Set mutes when you used the telephone, display shows 'TEL CALL', but you may still like to listen to the radio.
- Briefly press + KEY to restore the same volume level.

English

RADIO



WAVEBAND

- Briefly press the BAND key to select the desired waveband. The display shows:

FM1, FM2, or FM3, MW1, or MW2, or LW (when the Choice is set to 'EUROPE' under 'RADIO' option; see INITIAL SETTINGS).

FM1, FM2, or FM3, AM1, or AM2 (when the Choice is set to 'LATAM' or 'AMERICA' or 'ASIA' under 'RADIO' option; see INITIAL SETTINGS).

SEARCH TUNING

- Use search tuning to quickly search for a station.
- Briefly press the ◀ key or ▶ key.
 - You will receive a station after a short time. To search for another station, press the key again.

USEFUL TIPS

You can suppress MW or LW bands if not in used.

- See INITIAL SETTINGS; select Option 'MW' or 'LW' and set the Choice to 'OFF'.

Cannot tune to desired station?

- Desired station is too weak, try Manual Tuning.
- See INITIAL SETTINGS; check option 'RADIO'.
- See INITIAL SETTINGS; select option 'SRCH' and set the Choice to 'DX'.

MANUAL TUNING (if you know the frequency of the required station)

- Press the MANUAL key for at least 2 seconds (until you hear a beep) to switch from search tuning to manual tuning.
- Tune to the desired frequency with ◀ and ▶ key (keeping the key pressed changes the frequency quickly)
 - ▶ = higher frequency
 - ◀ = lower frequency

Note: The radio automatically switches back to search tuning after about 50 seconds with a beep.

PRESET KEYS 1-6 (STORE AND PRESET)

Six stations per waveband can be stored and recalled using the preset keys (1 to 6).

Storing a station

- Briefly press the BAND key to select the desired waveband.
- Tune-in the desired station frequency.
- Press the desired preset key (1 to 6) for at least 2 seconds (until you hear a beep).

Note: A previously-stored station is automatically erased if a new frequency is stored on the preset.

Recalling a station

- Briefly press the desired preset key. The display will show the band, frequency and preset number.

AUTO STORE (AST)

You can automatically store 6 FM stations on FM3 band or 6 AM(MW) stations on the AM2(MW2) band by using AUTOSTORE (AST) function. When you use Auto Store, the new station replace any station previously stored in the FM3 band or the AM2 (MW2) band.

Automatically storing stations

- Briefly press the BAND key to select the desired waveband.
- Briefly press the AST key, you will hear a beep.
- The set mutes and display shows 'FM3 AST' or 'MW2 AST' or 'AM2 AST'.
- You will hear a beep when it has finished storing 6 stations.
- You will hear the station on preset 1. Sometimes it may not be possible to find six stations. In this case, the remaining presets are programmed with 0000 (radio mute). If no stations are found, the previously stored stations are maintained.

FREQUENCY SCAN

The scan function gives you a quick impression of all the stations which can be received on the current waveband. You hear each station in turn for about 10 seconds.

- Press SCAN key for at least 2 seconds to switch SCAN function on or off.

* only for certain versions

7

RADIO DATA SYSTEM (RDS) ON FM

Many FM stations broadcast RDS information. This car radio uses the RDS information to offer you many advantages, including :

DISPLAY OF STATION-NAME

The set displays the name of the station instead of its frequency.

AUTOMATIC RETUNING

The set continuously check a list of Alternative Frequencies (AF) for the tuned radio station and automatically selects the best frequency.

USEFUL TIPS

- Display shows frequency (not station name).
- Set is tuned to non-RDS station.

Radio switches to another station while driving through different reception areas of different transmitters.

- See INITIAL SETTINGS; select Option 'AF' and set the Choice to 'ON'.

DISPLAY OF PROGRAMME TYPE (PTY)

If an RDS station is stored on a preset, you can check the type of programme being transmitted.

- Briefly press the relevant Preset key to see the programme type (if transmitted).

INFORMATION FROM RELATED RADIO STATIONS

Enhanced Other Networks (EON) is an RDS service where the broadcaster links some stations together. If you are tuned to a station where is linked to others by EON, the set is capable of receiving Traffic Announcements (and/or News bulletins) from both the tuned station and related stations.

ALARM MESSAGES (PTY Alarm)

This set automatically receives emergency messages made by the broadcaster.

- During the messages the display shows 'ALARM' and the station-name alternately.

TRAFFIC ANNOUNCEMENTS

You can switch on the TA mode to give priority to Traffic Announcements (even if you play a cassette/CD* or mute the set).

- You will hear the Traffic Announcements when broadcast, if you switch on the TA mode.
- If the tuned station does not enable the reception of Traffic Announcements, the display shows 'NO TA'. The radio automatically searches an appropriate station.

* only for certain versions

USEFUL TIPS

Display shows 'NO TA', and set beeps at intervals.

- The tuned station becomes too weak to enable the reception of Traffic Announcements. Use search tuning to find another station.
- If the TA mode is switched on, search tuning only selects stations which enable the reception of Traffic Announcements.

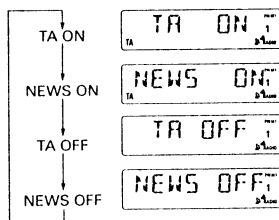
NEWS BULLETINS

You can switch on the NEWS mode to give priority to News bulletins (even if you play a cassette/CD* or mute the set). NEWS is not yet implemented in all countries.

Note : News bulletins may be interrupted by Traffic Announcements (if the TA mode is switched on)

Activate the desired TA or NEWS mode

- Select a FM band with BAND key.
- Briefly press the i key to select the desired RDS mode. When you briefly press the i key, the mode and display changes cyclically as follows:



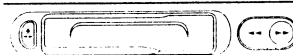
Interrupting Traffic Announcement/News mode

If you do not wish to continue listening to a particular Traffic Announcement or News mode, you can interrupt it without switching off the mode.

- Briefly press the i key.
- The set will return to the previous operating mode.

English

CASSETTE PLAYER



PLAYBACK

Inserting a cassette automatically switches the set on.

- Slide the cassette, with the open side to the right into the cassette opening.
- If a cassette is already inserted: Briefly press the SOURCE key to select TAPE as the source. The radio mutes and cassette playback starts. The direction of playback is shown by indicator < or >.

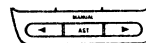
REVERSE (◀▶)

- Briefly press the ◀▶ button to change the direction of play. At the end of the tape, playback automatically continues with the other side of the tape.

REWIND (◀◀) / FAST FORWARD (▶▶)

- Briefly press ◀◀ button to rewind or ▶▶ button to fast forward. During fast forward or rewind, you hear the radio. If you continue fast winding until the end of the tape, playback restarts automatically.
- To stop the rewind/fast forward before reaching the end of the tape, press the same key again.

PREVIOUS / NEXT TRACK



- Briefly press the ◀ or ▶ button to select the desired track. Playback resumes starting from the chosen track. The sound is muted until the track you have selected is reached.

CASSETTE EJECT (▲)

- Press ▲ key for more than 2 seconds to eject the cassette.

MAINTENANCE

After extended use of the cassette player, dust, contamination or grime can accumulate on the playback head.

This results in diminishing high note reproduction. This can be remedied using a cleaning cassette (once or twice a month) and playing it through like an ordinary cassette.

CARE OF CASSETTES

- Only use good quality cassettes (not longer than C-90).
- To avoid possible tape damage always take out the cassette after use. Put them back in their boxes immediately after use.
- Never expose cassettes to heat or direct sunlight.

CD CHANGER*

A Philips CD changer (D'B type) with 6 or 10 discs can be connected to this car radio.



CD PLAYBACK

- Briefly press the SOURCE key to select CHANGER as the source.
- Select the desired disc with DISC▲ or DISC▼. The display shows the track number, elapsed playing time and current disc number during playback. At the end of the disc, playback automatically continues with the next disc. Any missing disc is automatically skip.

PREVIOUS/NEXT TRACK

- Briefly press the ◀ or ▶ buttons to select the desired track. Playback resumes starting from the chosen track. The display shows the selected track number and elapsed playing time.

FAST BACKWARD/FORWARD

- Press and hold ◀ or ▶ buttons to move quickly to another part of the disc during playback. Playback resumes when ◀ or ▶ is released.

TRACK SCAN

- Press SCAN key during playback to hear the first 10 seconds of each track.
- Press the SCAN key again to resume normal playback.

* only for certain versions

10

9

RANDOM TRACK PLAYBACK

- Press **RANDOM** key during playback to play the track on the disc in random order.
- Press the **RANDOM** key again to resume normal playback.

REPEAT TRACK

- Press **REPEAT** key during playback to repeat the current track.
- Press the **REPEAT** key again to resume normal playback.

USEFUL TIPS

Display shows 'CD ERROR'.

- The disc is dirty or inserted upside down.

Display shows 'NO CD'.

- No disc is inserted in the CD magazine.

CARE OF DISCS

- Avoid making fingerprints on the disc
- Put the disc back in its box immediately after eject it, to protect the disc from damage and dust.
- Never expose disc to heat or direct sunlight.

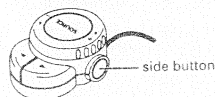
PHILIPS REMOTE CONTROL (EA2001)

A Philips remote control (EA2001) can be connected to this set. See your dealer for more information. The remote control allows you to carry out some of the main functions of the set, without the need to take your eyes off the road while driving. This increases your safety.

USEFUL TIPS

Remote control connected correctly but cannot control the set?

- See **INITIAL SETTINGS**; select Option 'REMOTE' and set the Choice to 'Y'.



AUDIO

- Volume**: Adjust the volume by turning the wheel.
- Audio mute (Silence)**: Press **SOURCE** key for more than 2 seconds to mute the set or cancel the mute.
- SOURCE**: Briefly press the **SOURCE** key to select the desired source. The display shows: **RADIO**, **TAPE** or **CHANGER** * (**AUX** *).

RADIO

- Waveband selection**: Press the remote control side button for more than 2 seconds to select the desired waveband.
- Recalling a preset**: Briefly press the remote control side button to select the next preset (1 to 6).
- Search tuning**: Briefly press the ◀ key or ▶ key to quickly search for a station.

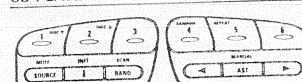
CASSETTE

- Previous / next track**: Briefly press the ◀ key or ▶ key to select desired track.
- Rewind/Fast forward**: Press the ◀ or ▶ key for more than 2 seconds to rewind or fast forward. Press the same key for more than 2 seconds to stop fast winding.
- Reverse**: Briefly press the remote control side button to change direction of play.

CD CHANGER *

- Previous / next track**: Briefly press the ◀ key or ▶ key to select desired track.
- Fast backward / Forward**: Press and hold ◀ key or ▶ key to move quickly to another part of the disc during playback. Playback resumes when ◀ or ▶ is released.
- Disc selection**: Briefly press the remote control side button to select the next disc.
- Track scan**: Press the remote control side button for more than 2 seconds to switch scan on or off.

CD PLAYER



CD PLAYBACK

This CD player is suitable for 12cm discs. Inserting a disc automatically switches the set on.

- Slide the disc (with the label facing upwards) into the slot, or
 - If a disc is already inserted: Briefly press the **SOURCE** key to select CD as the source.
- The display shows the track number, elapsed playing time during playback.

PREVIOUS/NEXT TRACK

- Briefly press the ◀ or ▶ buttons to select the desired track. Playback resumes starting from the chosen track. The display shows the selected track number and elapsed playing time.

FAST BACKWARD/FORWARD

- Press and hold ◀ or ▶ buttons to move quickly to another part of the disc during playback. Playback resumes when ◀ or ▶ is released.

TRACK SCAN

- Press **SCAN** key during playback to hear the first 10 seconds of each track.
- Press the **SCAN** key again to resume normal playback.

RANDOM TRACK PLAYBACK

- Press **RANDOM** key during playback to play the track on the disc in random order.
- Press the **RANDOM** key again to resume normal playback.

REPEAT TRACK

- Press **REPEAT** key during playback to repeat the current track.
- Press the **REPEAT** key again to resume normal playback.

DISC EJECT

- Briefly press ▲ to eject the disc from the player.
- If the disc is not removed within 15 seconds, the player will reload the disc.

USEFUL TIPS

- Display shows 'CD ERROR'.
- The disc is dirty or inserted upside down.
- Display shows 'NO CD'.
- No disc is inserted in the CD magazine.

CARE OF DISCS

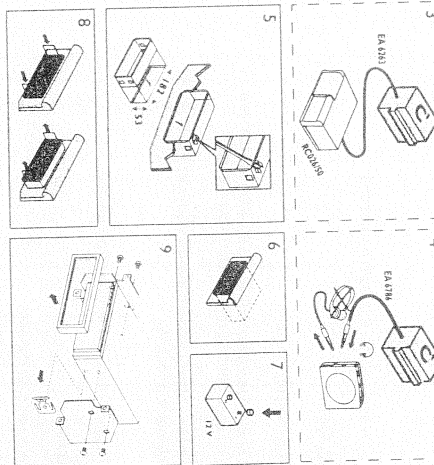
- Avoid making fingerprints on the disc
- Put the disc back in its box immediately after eject it, to protect the disc from damage and dust.
- Never expose disc to heat or direct sunlight.

* only for certain versions

11

10

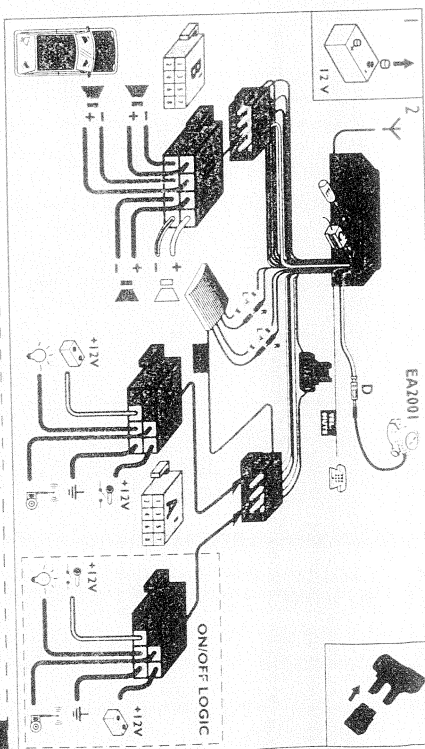
CONNECTOR C	DESCRIPTION
13	D2B+
14	D2B-
15	D2B GROUND
17	REM+
16	ODC+
19	LINE IN LEFT
18	LINE IN GROUND
20	LINE IN RIGHT



KEEP THIS CARD SAFELY - NOT IN YOUR CAR

PHILIPS

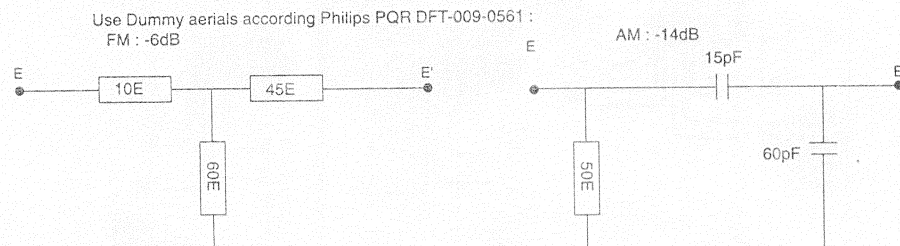
Philips Car Systems
Security Card



SERVICE HINTS

FM and AM search levels are stored in the EEprom. Service code of the EEprom will be release in the next service newsletter. When you change the tuner module or the Eeprom, in order not to affect the performance of the set, you will need to reprogramme the FM and AM search levels using this service routine.

Make sure that you connect the following 75E FM and AM dummy antenna matching unit before reprogramming the search levels.



FM SEARCH LEVEL ALIGNMENT :

1. Input signal as below for LO (Local) search level alignment via the FM Dummy antenna:
LO SEARCH LEVEL : FM 93.0MHz, E= 240uV
2. Tune in and store 93.0MHz into Preset 1 on BAND FM3.
3. Switch off the set.
4. Press and hold both "BAND" and "AST" key while turning on the set.
Display shows : "93.0 000F"
5. Press Preset 1 for more than 2 seconds (you will hear a bleep) to store the LO (Local) search level.
6. Input signal as below for DX (Distance) search level alignment via the FM Dummy antenna:
DX SEARCH LEVEL : FM 93.0MHz, E = 15uV
7. Press Preset 2 for more than 2 seconds (you will hear a bleep) to store the DX (Distance) search level
6. Press any key briefly (other than BAND) to exit this service routine.

AM SEARCH LEVEL ALIGNMENT :

1. Input signal as below for LO (Local) search level alignment via the AM Dummy antenna :
LO SEARCH LEVEL : AM 531kHz, E= 350uV
2. Tune in and store 531kHz into Preset 1 on BAND AM1.
3. Switch off the set.
4. Press and hold both "BAND" and "AST" key while turning on the set.
5. Press BAND to change into AM1
Display shows : "531 000F"
6. Press Preset 1 for more than 2 seconds (you will hear a bleep) to store the LO (Local) search level.
7. Input signal as below for DX (Distance) level alignment via the AM Dummy antenna :
DX SEARCH LEVEL : AM 531kHz, E= 70uV
8. Press Preset 2 for more than 2 seconds (you will hear a bleep) to store the DX (Distance) search level.
9. Press any key briefly (other than BAND) to exit this service routine.

Service Test Mode :

Tuner reception check (Test mode)

Press Preset 2 and Preset 4 together to activate tuner test mode.

Display shows : "XXXX QRMF"

XXXX - 4 figures of tuned frequency

Q- Selected frequency quality

R- Best AF quality

M- Multipath
range 0 ... F hexadecimal
(0 = NO Multipath)

F- Field strength
range 0 F hexadecimal
(F = Good signal strength)

Keyboard Test

This test is called by switching the set ON while keeping pressed the preset 3 key. A different number will appear each time you press a new key (e.g. Preset 3 corresponds to T03). This test can be exited at any moment by switching off the set.

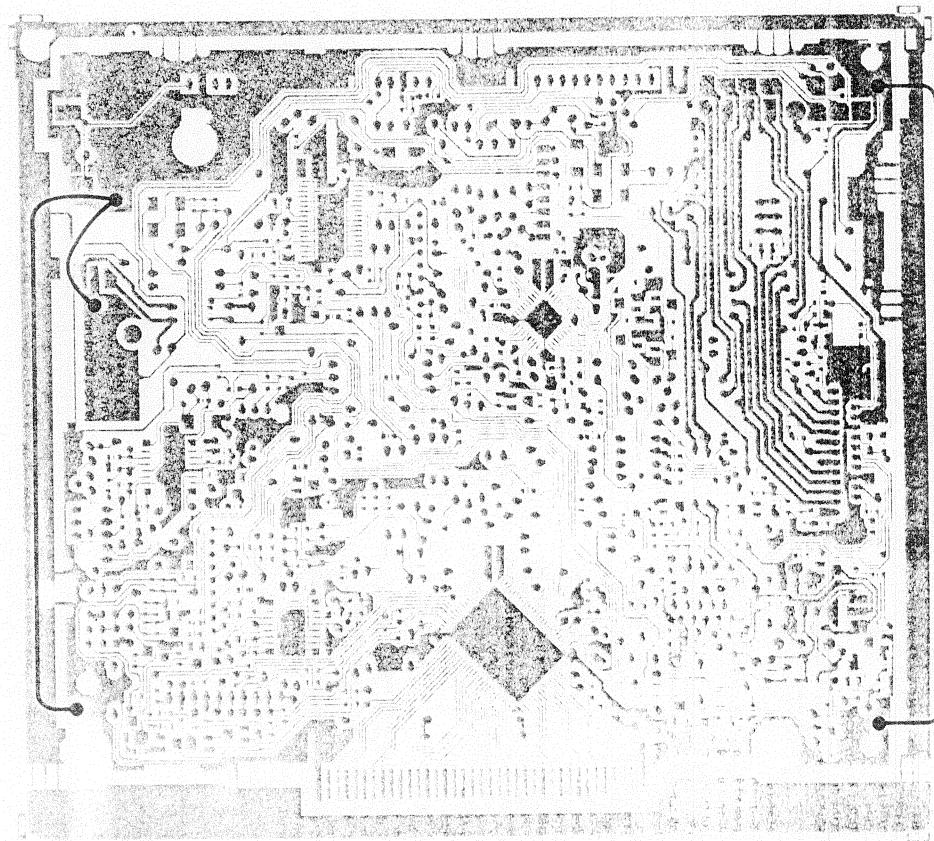
PCS 77 867

3

CONNECTING THE PCB FOR MEASUREMENT ON THE COPPER SIDE

1. Assemble back the heat sink for the power ic to prevent overheating.
2. Connect wire as shown.
3. Reconnect the cable for the front assembly and the tapedeck.

Note: Remember to disconnect wire before encasting.



LCD Display Test

Press Preset 1 and Preset 5 together to activate LCD display test. All segments of the LCD are lighted up.

Software release status

CHECKSUM FOR SOFTWARE RELEASE 1.0 :

0070 (RC549/519)

433D (RC624/604)

Press Preset 1 and Preset 6 together to see the software release status

Display shows : "XXXX H"

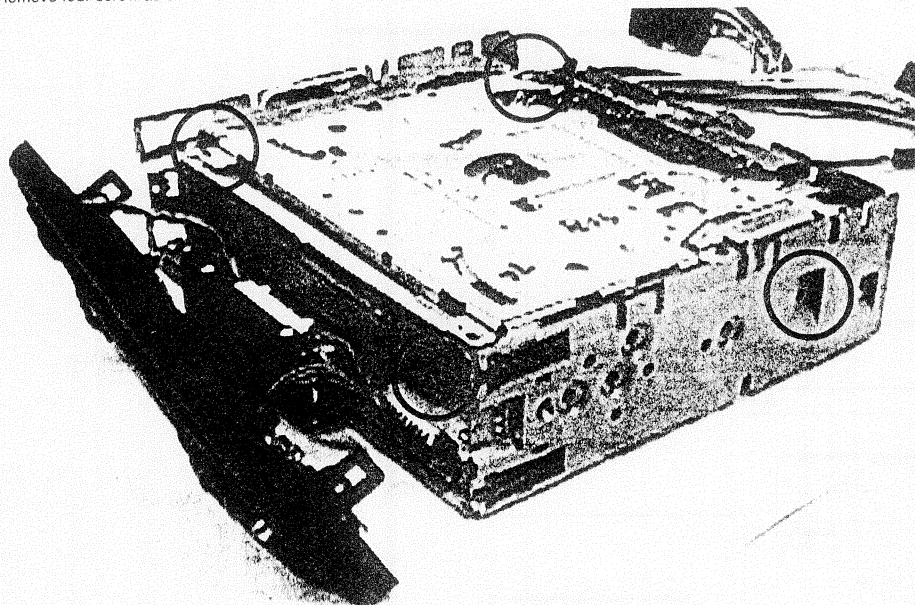
XXXX = Checksum

H = Hexa. decimal

SERVICE HINTS

To remove the CDMM2 mechanism :

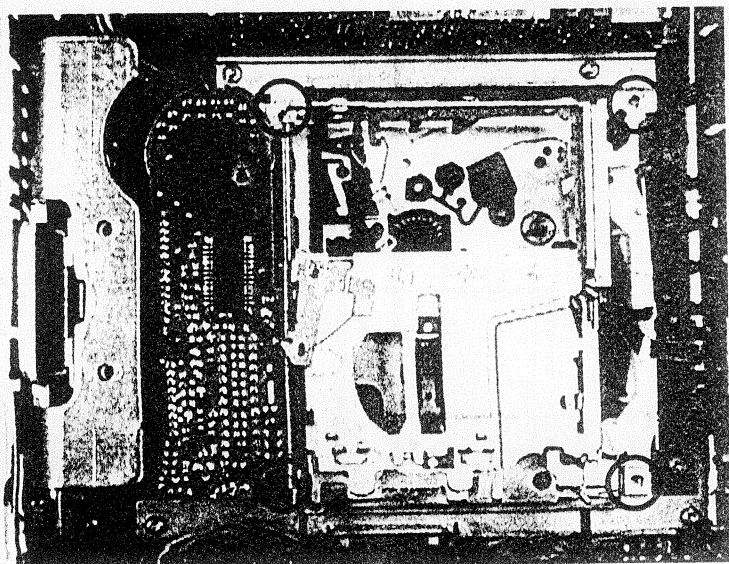
1. Detach the ornamental front from the frame.
2. Remove four screw as shown in the circle.



SERVICE HINTS

To remove the SCA mechanism :

Remove four screw as shown in the circle.



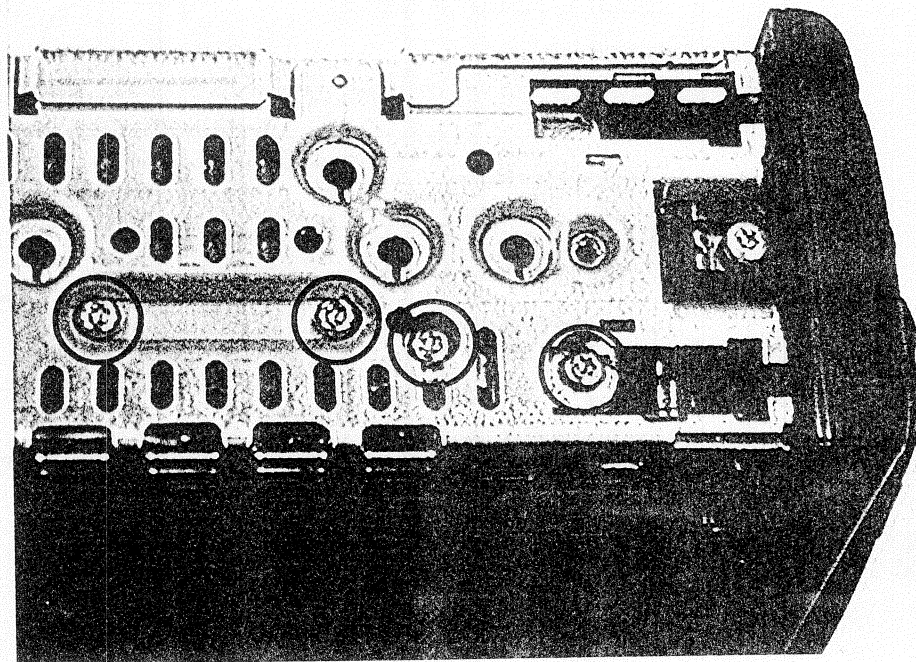
SERVICE HINTS

To remove the Power IC heat sink :

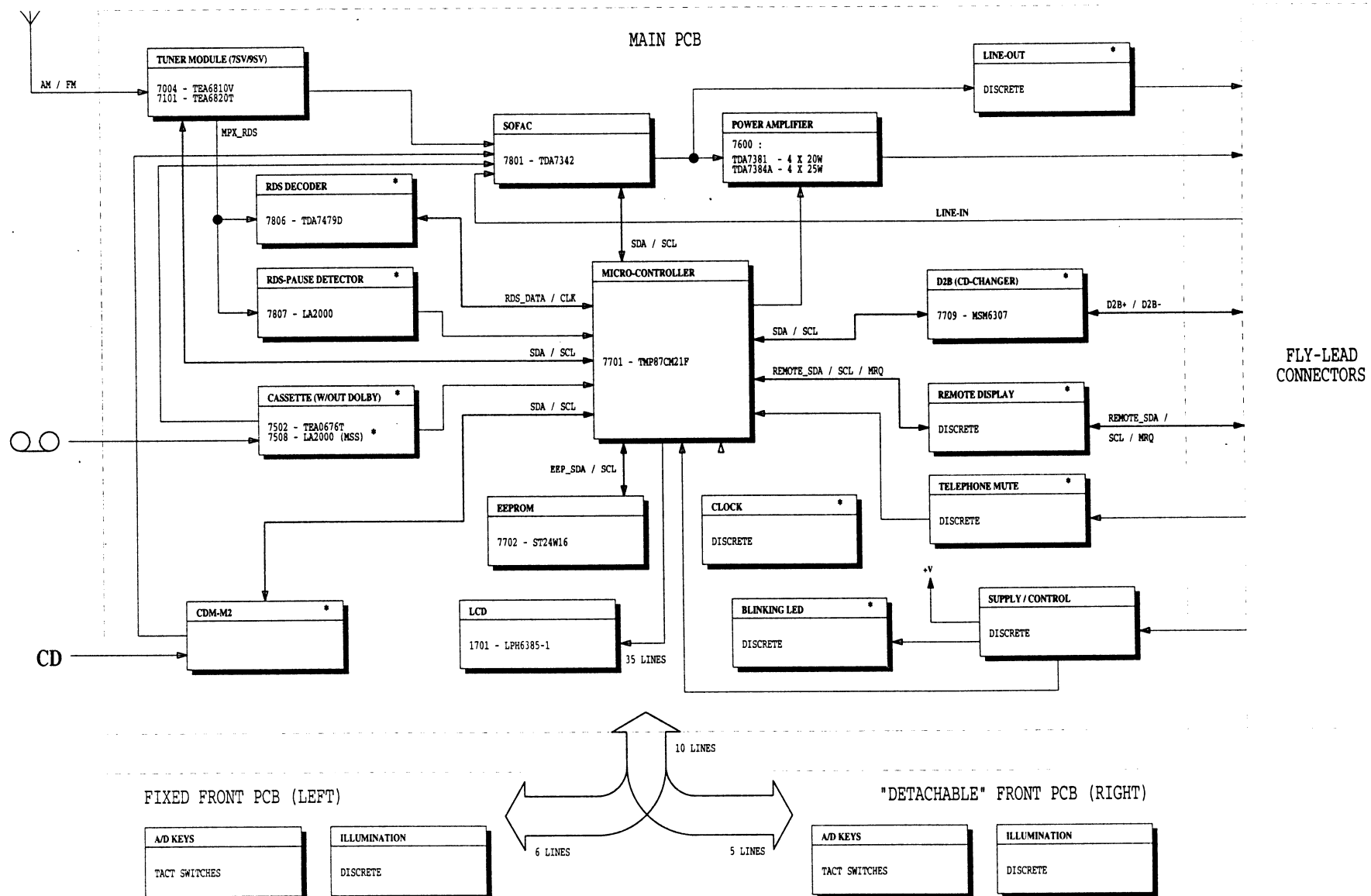
Remove four screw as shown in the circle.

How to remove the Power IC heat sink without damaging the solder paste?

There is a solder paste on the Power IC which helps to improve heat transfer from the power ic to the heat sink. To prevent damage to the solder paste, remove the heat sink only when the set has cool down.

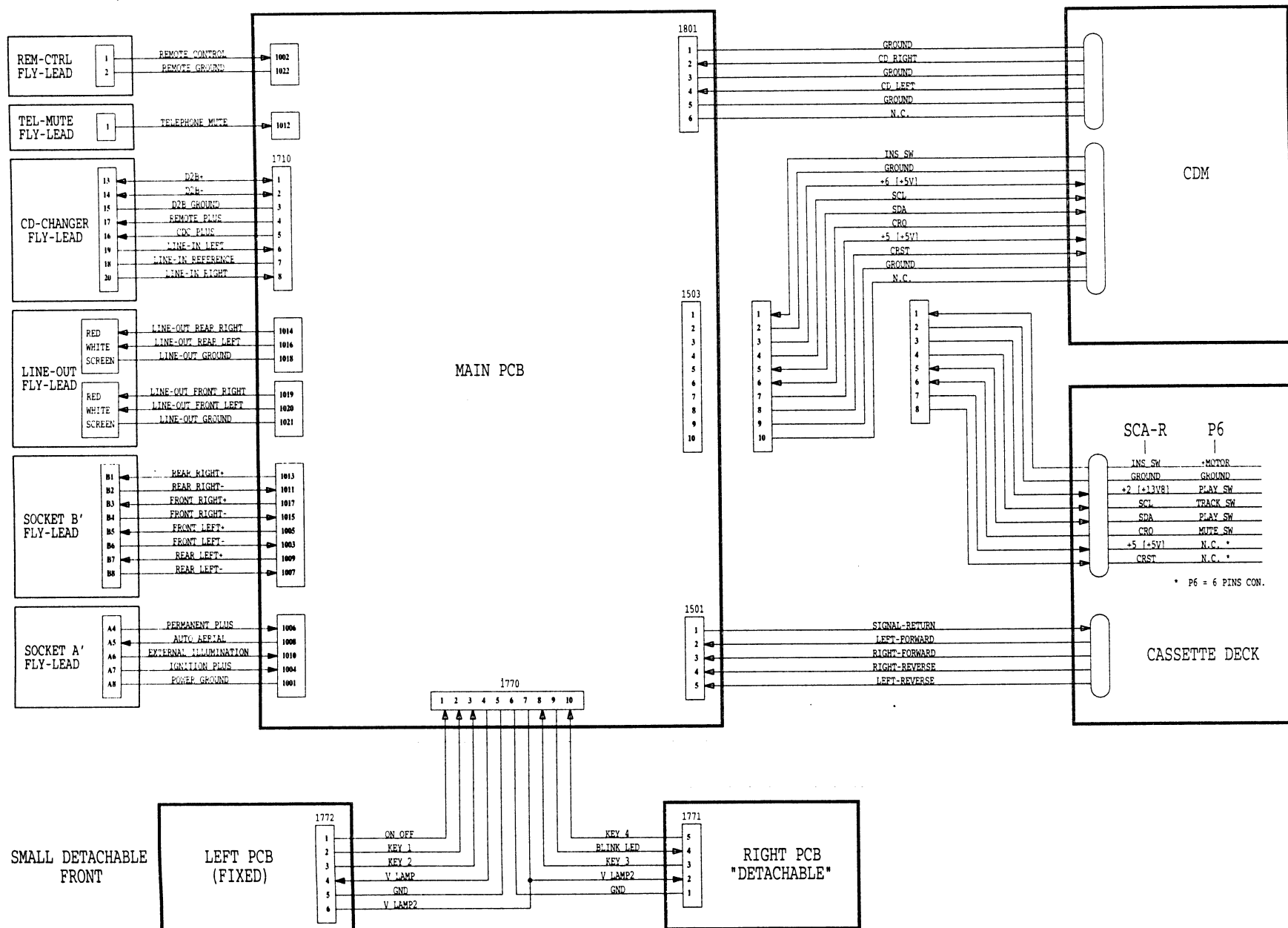


PART A : ELECTRICAL ARCHITECTURE



* = OPTION

PART B : WIRING DIAGRAM



PART 10A : SMALL DETACHABLE FRONT [CD]

The diagram illustrates the front panel circuitry for a CD player, divided into three main sections: the main PCB connection, the fixed front PCB (left), and the detachable front PCB (right).

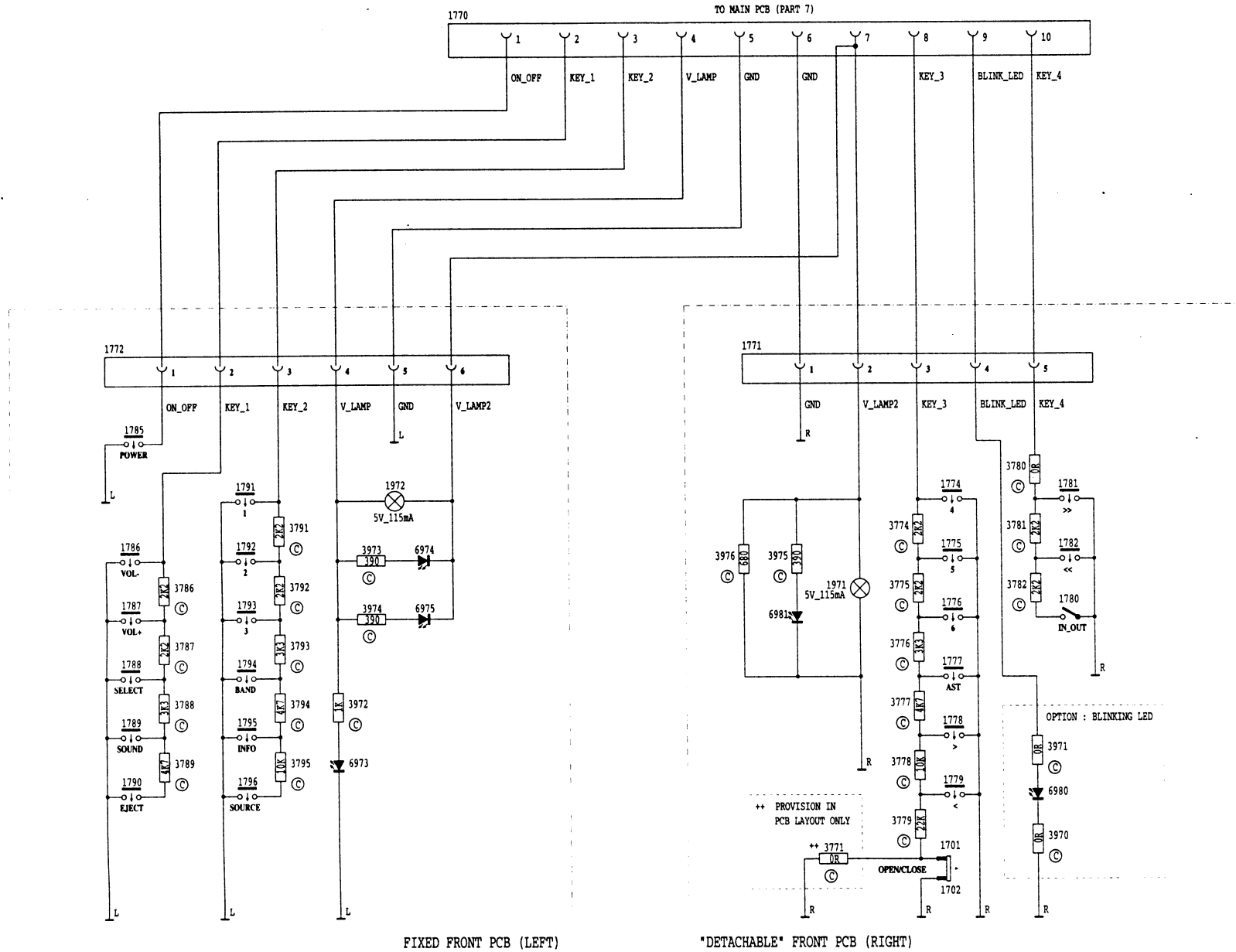
Main PCB Connection (Top): A horizontal bus labeled 1770 connects to the main PCB (PART 7). It includes terminals for ON_OFF, KEY_1, KEY_2, V_LAMP, GND, GND, KEY_3, BLINK_LED, and KEY_4.

Fixed Front PCB (Left): Labeled 1772, this section includes controls for ON_OFF, KEY_1, KEY_2, V_LAMP, GND, and V_LAMP2. It features a power switch (1785), volume controls (1786, 1787, 1788), a select switch (1789), and various indicator lights (1791, 1792, 1793, 1794, 1795, 1796) and resistors (3786, 3787, 3791, 3792, 3793, 3794, 3795). A 5V_115mA lamp (1972) is connected to the V_LAMP terminal.

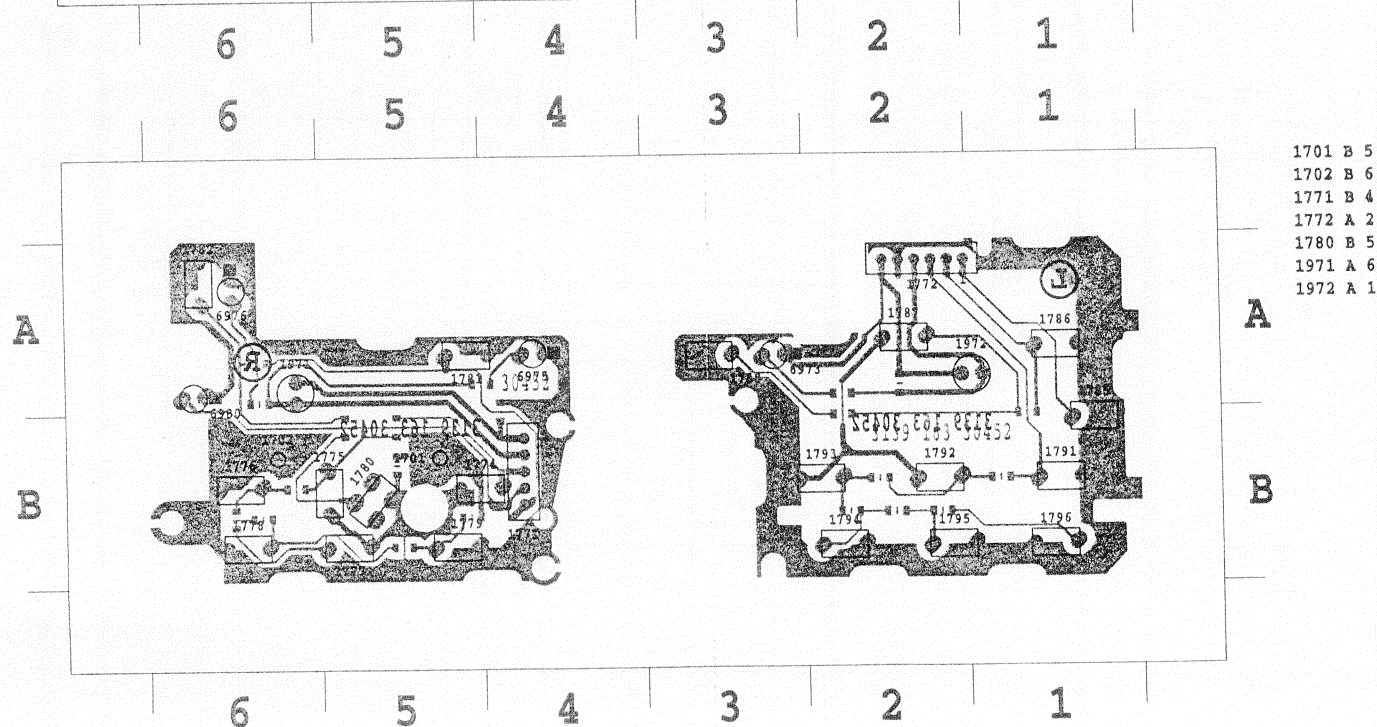
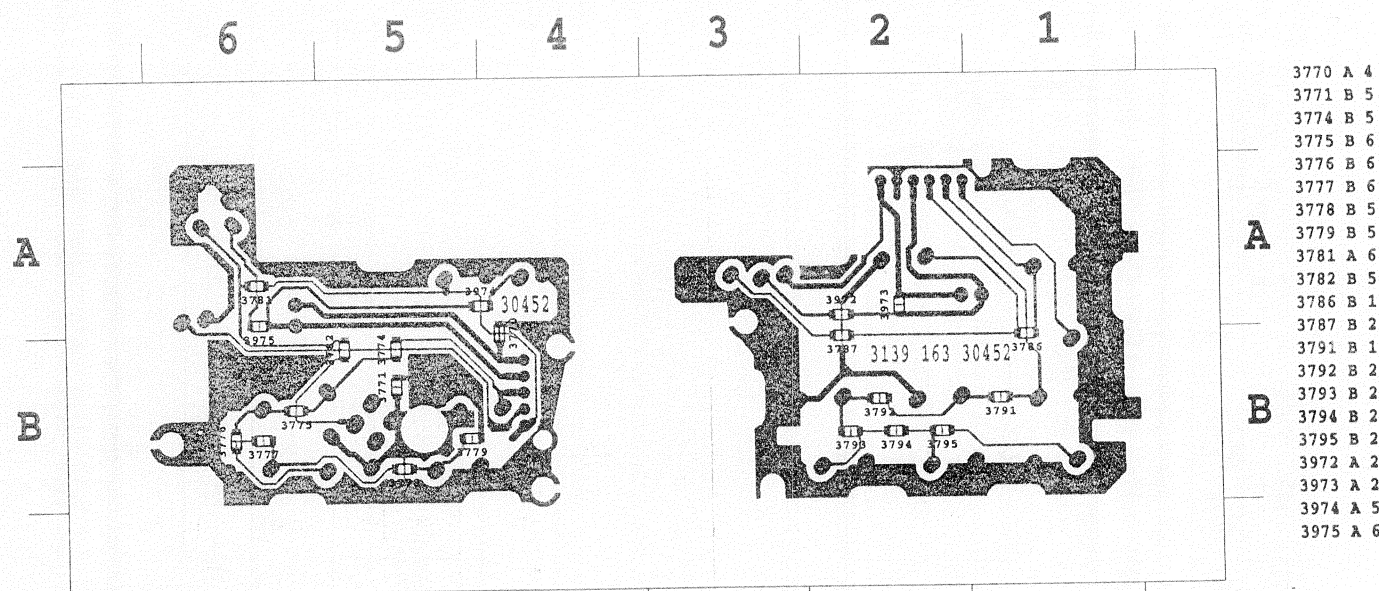
"Detachable" Front PCB (Right): Labeled 1771, this section includes controls for GND, V_LAMP2, KEY_3, BLINK_LED, and KEY_4. It features a power switch (1781), volume controls (1782, 1783, 1784), a select switch (1785), and various indicator lights (1774, 1775, 1776, 1777, 1778, 1779) and resistors (3774, 3775, 3776, 3777, 3778, 3779). A 5V_115mA lamp (1971) is connected to the V_LAMP2 terminal. A provision for a blinking LED (6980) is shown, along with a provision for a PCB layout only (3771).

5-1

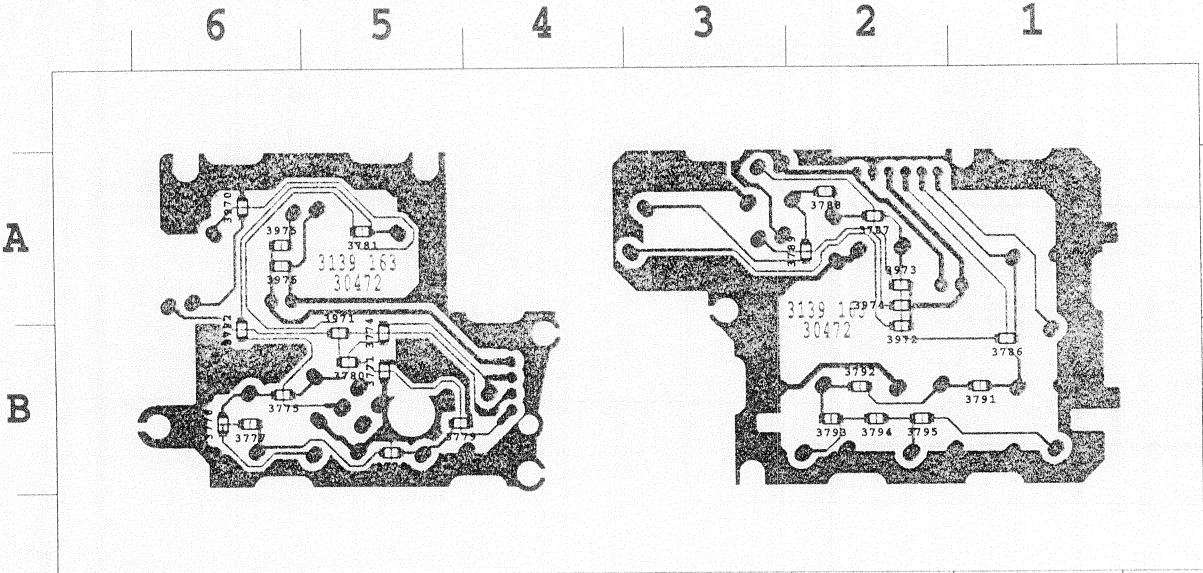
PART 10B : SMALL DETACHABLE FRONT [SCA]



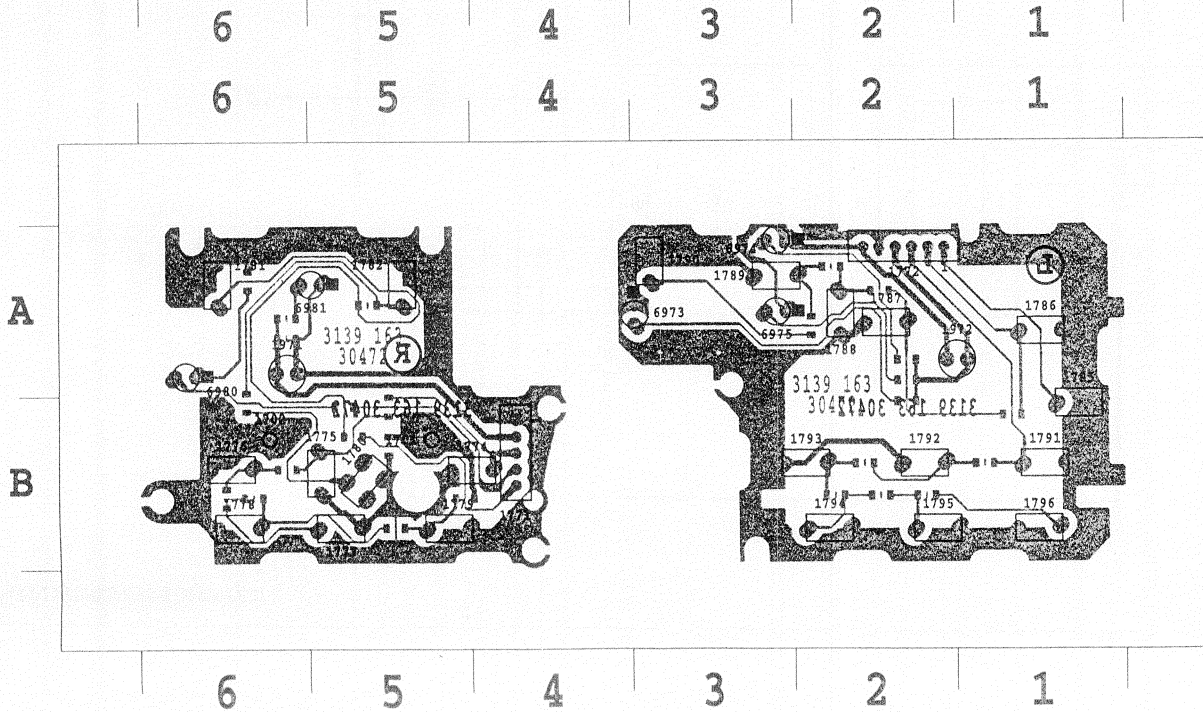
FRONT BOARD (CD)



FRONT BOARD (SCA)



- 3771 B 5
- 3774 B 5
- 3775 B 6
- 3776 B 6
- 3777 B 6
- 3778 B 5
- 3779 B 5
- 3780 B 5
- 3781 A 5
- 3782 B 6
- 3786 B 1
- 3787 A 2
- 3788 A 2
- 3789 A 2
- 3791 B 1
- 3792 B 2
- 3793 B 2
- 3794 B 2
- 3795 B 2
- 3970 A 6
- 3971 B 5
- 3972 B 2



- 1701 B 5
- 1702 B 6
- 1771 B 4
- 1772 A 2
- 1780 B 5
- 1791 A 6
- 1972 A 1

unless otherwise stated.

1	Square wave 5V
2	Square wave 5V
3	2.5V
4	Audio signal
5	5V
6	0V
7	Audio signal
8	Audio signal
9-11	0V
12	5V
13	Sine wave 0.6V
14	Sine wave 3.2V
15	N.C.
16	Square wave 5V

1	Audio signal
2	8.2V
3	2.3V
4	N.C.
5	GND
6	5V
7-8	N.C.
9	8.5V

1	AM/FM INPUT
2	GND
3	5V
4	8.5V
5	GND
6	5V
7	Audio signal
8, 11	N.C.
9	5V
10	5V
12	TUNER LEFT
13	TUNER RIGHT
14	GND

1100
TUNER MODULE 7SV / 9SV

OPTION : RDS

7806
TDA7479D

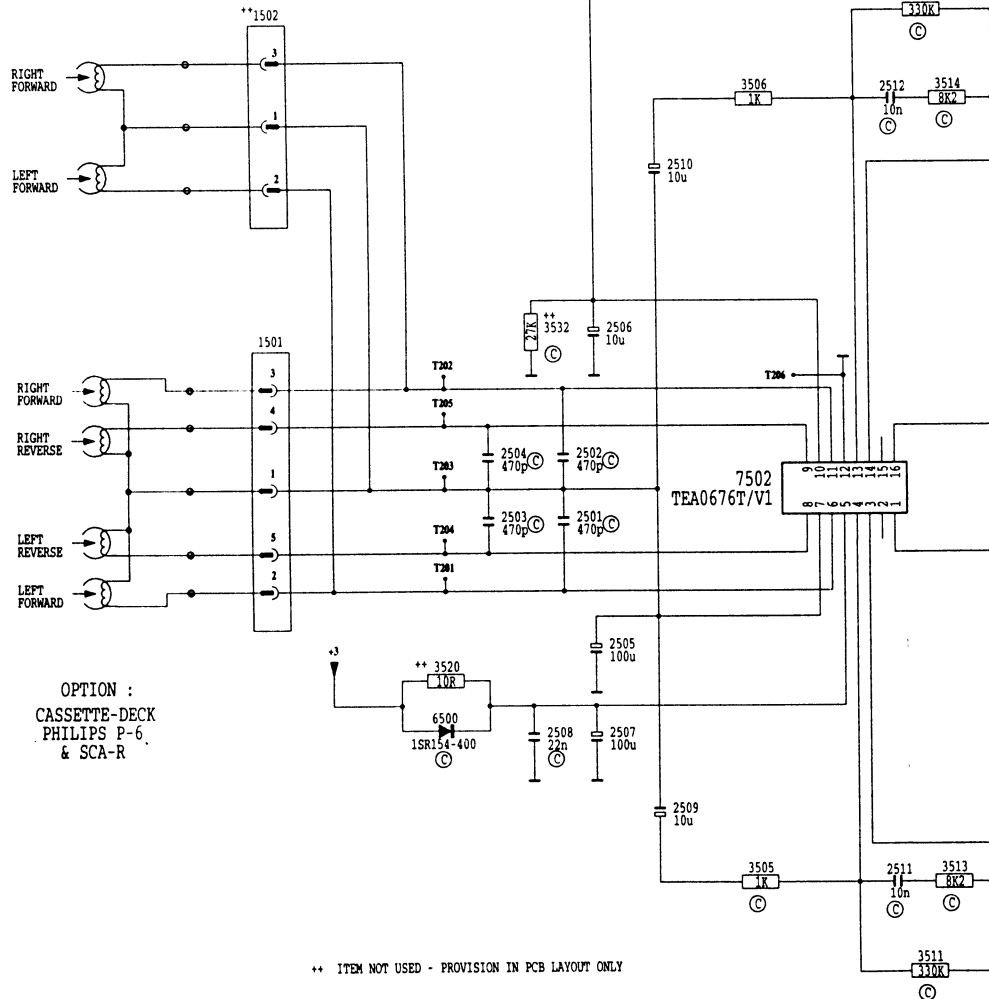
7807
LA2000

* = INSERT ONLY IF IC TYPE IS SAA6579T

* = INSERT ONLY IF IC TYPE IS SAA6579T

PART 2 : CASSETTE PRE-AMP, DOLBY & MSS (MAIN PCB)
THIS PART IS DELETED IN CD VERSIONS

OPTION :
CASSETTE-DECK
SHINWA CDS-36
& CDS-101



Voltage measured in
CASSETTE mode

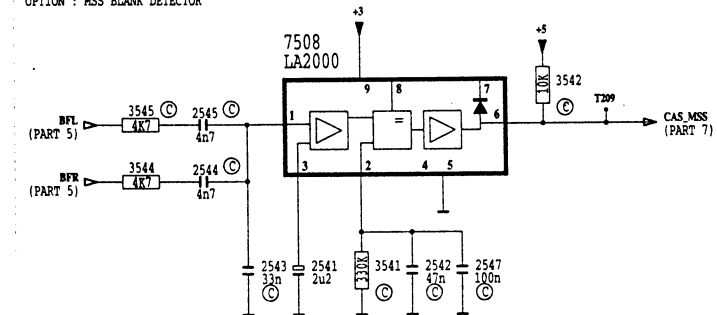
7508 LA2000

1	2.1V
2	7.5V
3	2.1V
4	N.C.
5	OV
6	5V
7	N.C.
8	N.C.
9	8.5V

7502 TEA0676T/V1

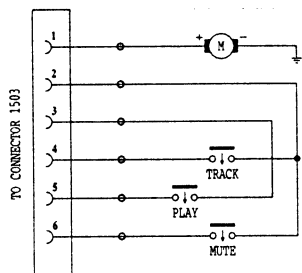
1	4.3V
2	N.C.
3	4.2V
4	4.2V
5	8.4V
6	4.2V
7	4.2V
8	4.2V
9	4.2V
10	3.2V
11	4.2V
12	OV
13	4.2V
14	4.2V
15	N.C.

OPTION : MSS BLANK DETECTOR

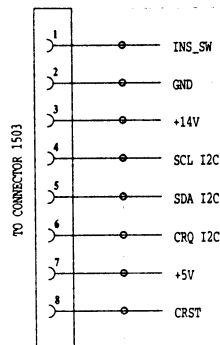


PART 3 : DECK CONTROL (MAIN PCB)

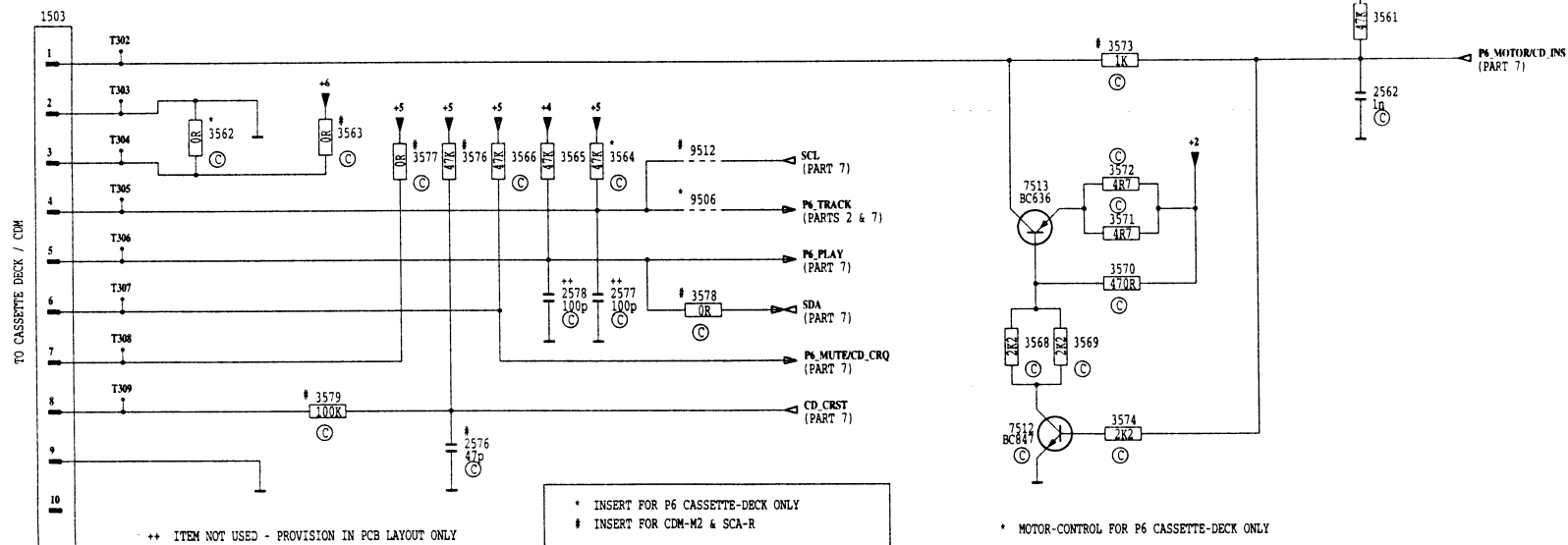
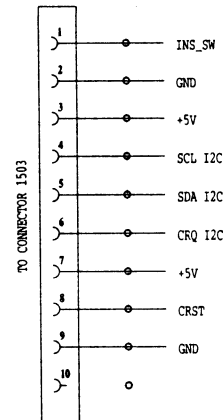
OPTION : PHILIPS P6-3.1 CASSETTE-DECK



OPTION : PHILIPS SCA-R CASSETTE-DECK (V3.1)

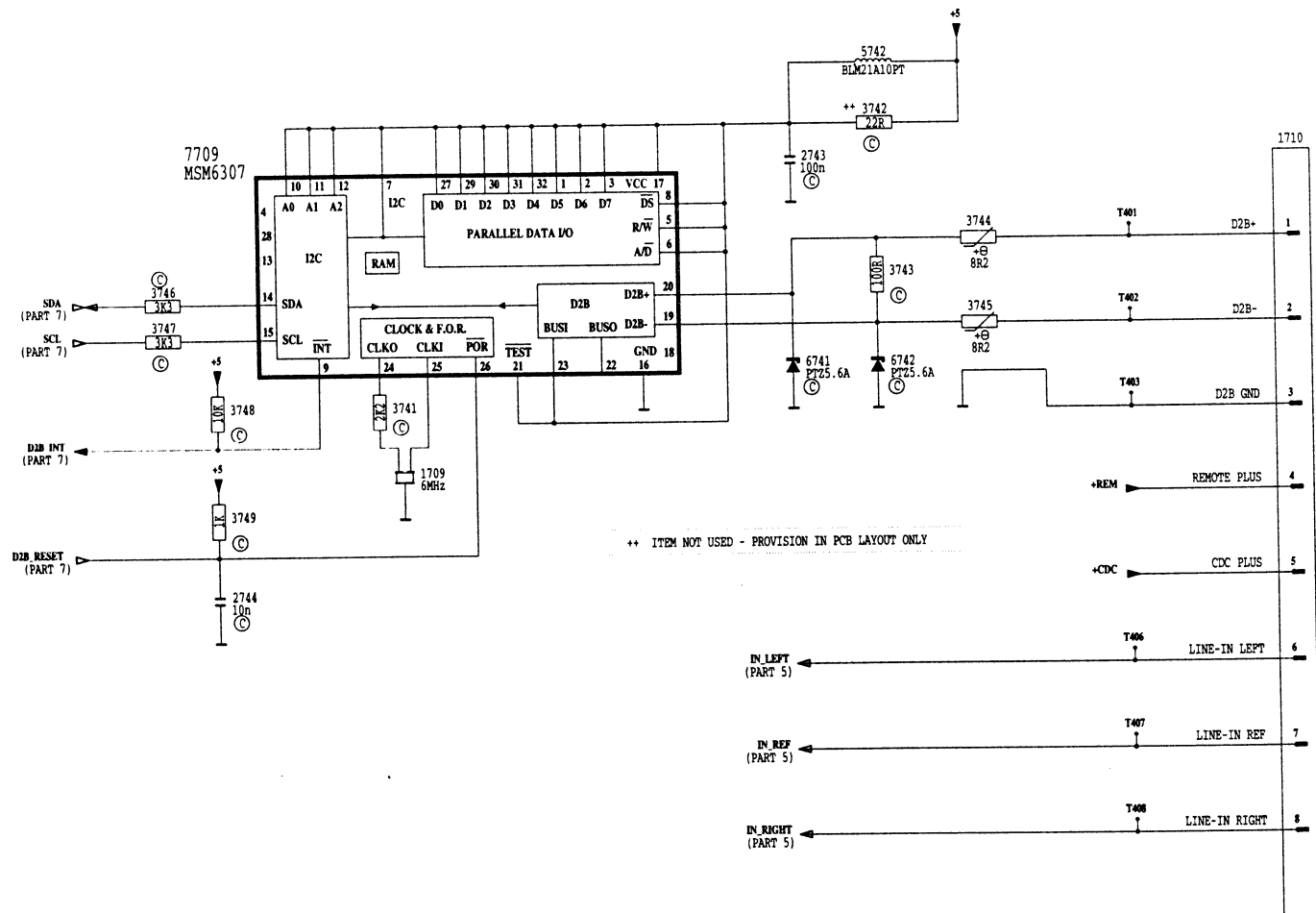


OPTION : PHILIPS CDM-M2 CD-LOADER (V1.1)



PART 4 : CD-CHANGER CONTROL / CDCC (MAIN PCB)

N.B. THIS PART IS AN OPTION.



Voltage measured in FM mode
A4 = 14.4V
A7 = 14.4V
unless otherwise stated.

7709 MSM6307

1-3	5V
5-8	5V
9	5V
10-12	5V
14-15	5V
16	GND
19-20	2.5V
21, 23	5V
24-25	2.3V
26	5V
27, 29	5V
30-32	5V

++ ITEM NOT USED - PROVISION IN PCB LAYOUT ONLY

TO CD-CHANGER FLY-LEAD

PART 5: SOFAC (MAIN PCB)

Voltage measured in FM mode

A4 = 14.4V

A7 = 14.4V

unless otherwise stated.

7801 TDA7342

1-8 4.3V

9-13 4.3V

14 7.5V

15-16 4.3V

17-20 4.3V

21 4.9V

22-25 3.6V

26 0V

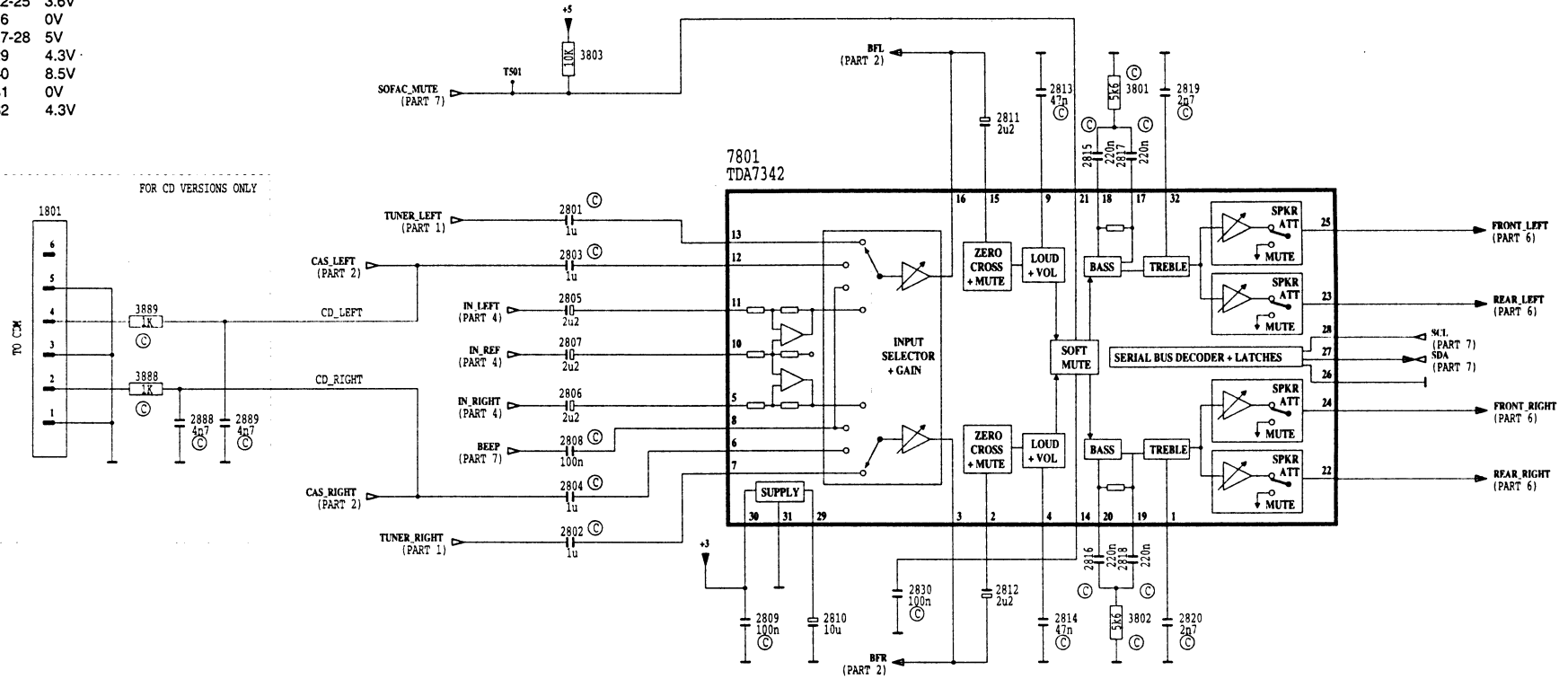
27-28 5V

29 4.3V

30 8.5V

31 0V

32 4.3V



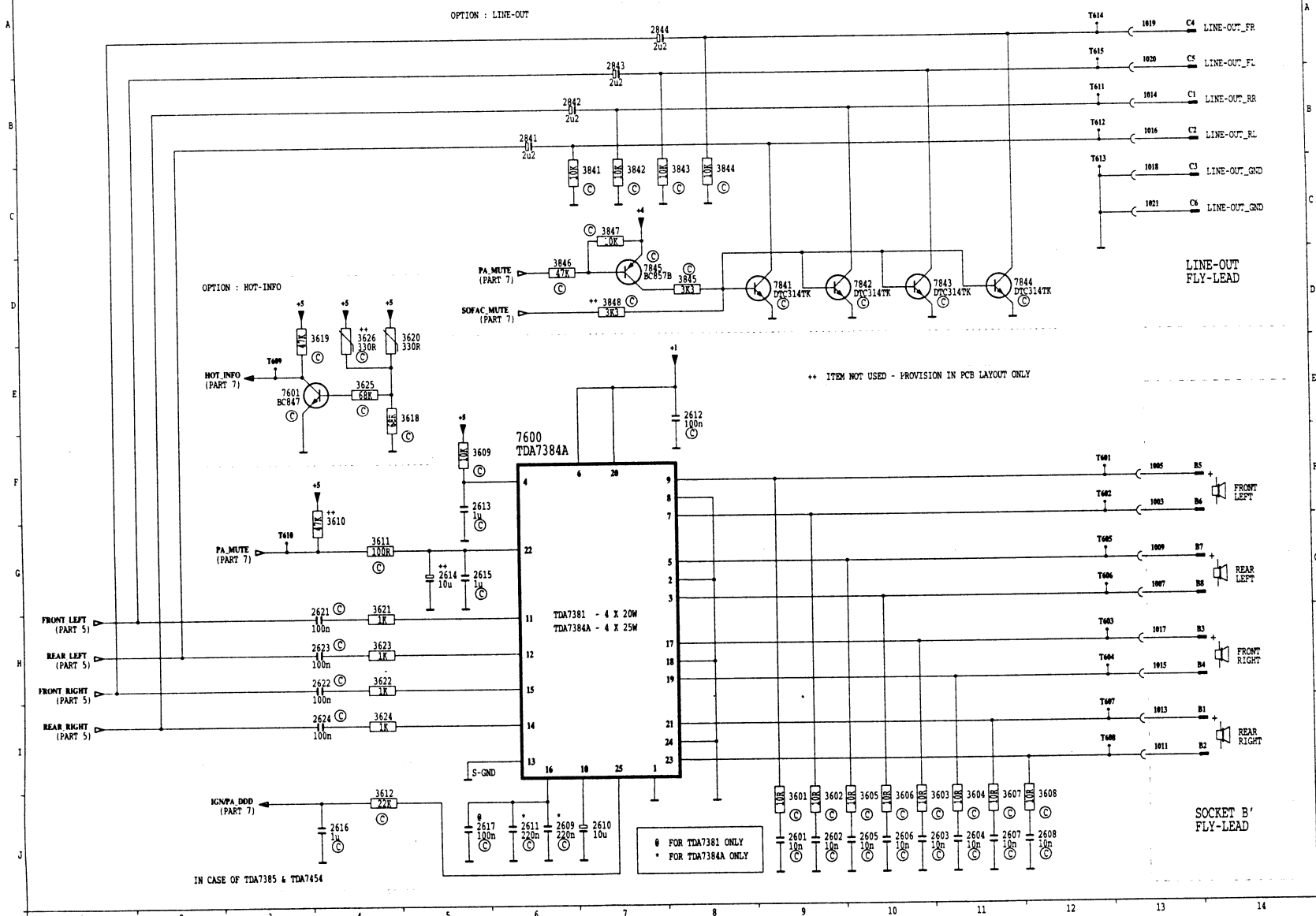
Voltage measured in FM mode

A4 = 14.4V
A7 = 14.4V
unless otherwise stated.

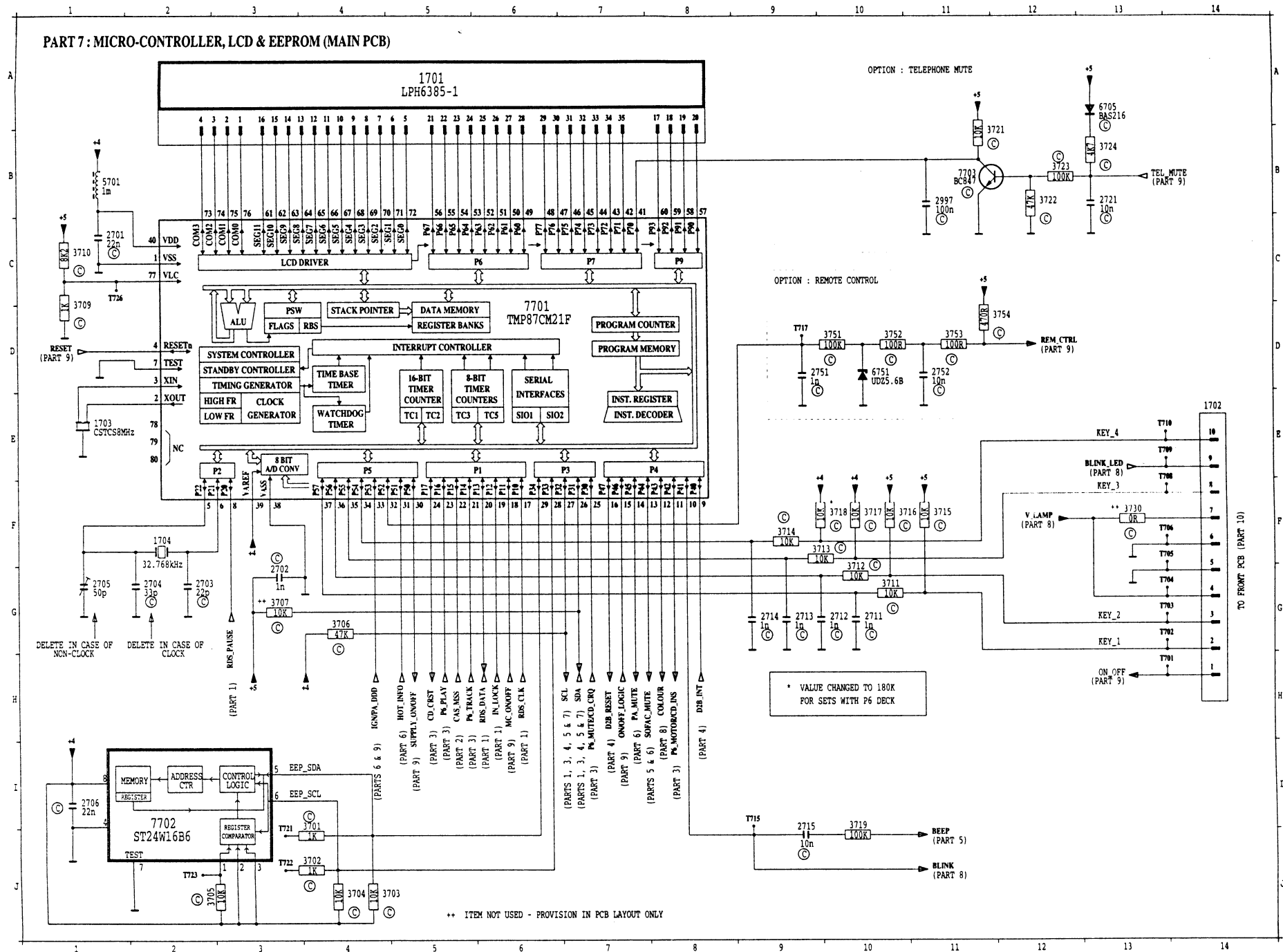
7600 TDA7384A

- 1 0V
- 2 0V
- 3 7.3V
- 4 5V
- 5 7.3V
- 6 14.4V
- 7 7.3V
- 8 0V
- 9 7.3V
- 10 7.2V
- 11 7.1V
- 12 7.1V
- 13 0V
- 14 7.1V
- 15 7.1V
- 16 7.2V
- 17 7.3V
- 18 0V
- 19 7.3V
- 20 14.4V
- 21 7.3V
- 22 5V
- 23 7.3V
- 24 0V
- 25 0V

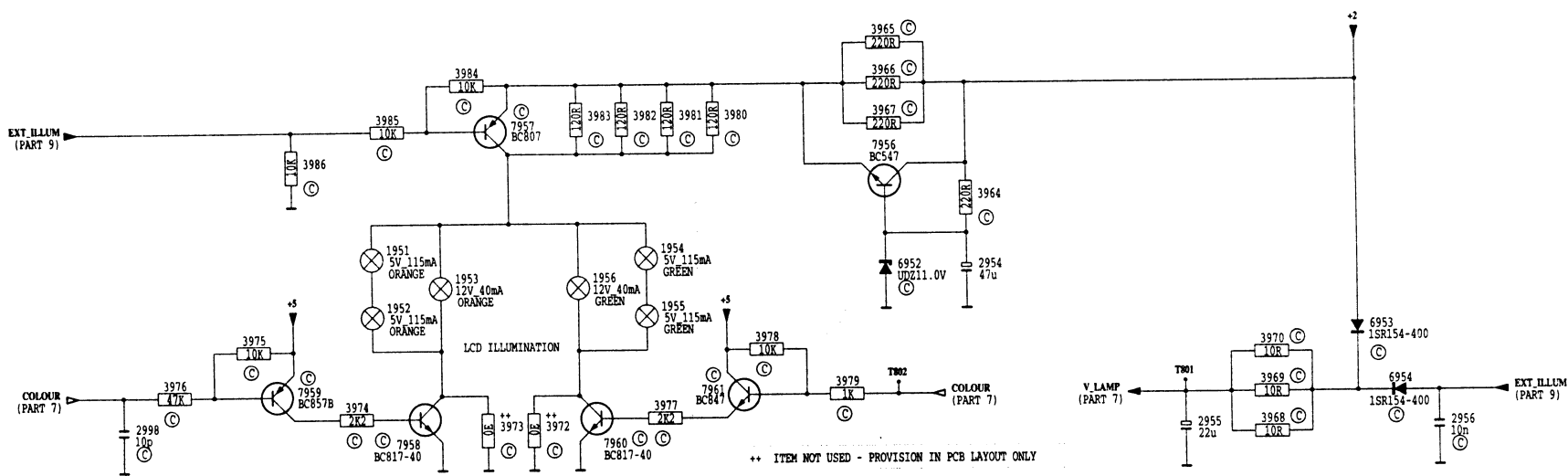
PART 6 : POWER AMPLIFIER & LINE-OUT (MAIN PCB)



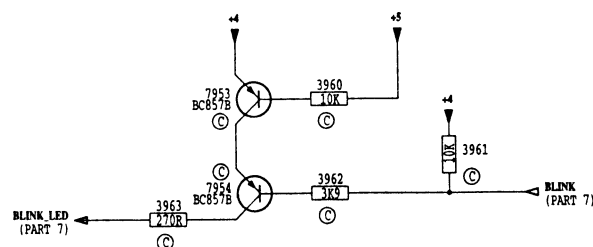
PART 7: MICRO-CONTROLLER, LCD & EEPROM (MAIN PCB)



PART 8 : LCD ILLUMINATION & BLINKING LED (MAIN PCB)



OPTION : BLINKING LED



PART 9: SUPPLY & CONTROL (MAIN PCB)

1 2 3 4 5 6 7 8 9 10 11 12 13 14

A

B

C

D

E

F

G

H

I

J

• 4X7W / 2X50W 4X20W
5900 160u AS SHOWN

SOCKET A' FLY-LEAD

IGNITION PLUS (+14V4)
POWER GROUND
PERMANENT PLUS (+14V4)
REMOTE ON/OFF
AUTO AERIAL
PILOT/EXTERNAL ILLUMINATION
TELEPHONE MUTE FLY-LEAD
TELEPHONE MUTE
REMOTE CONTROL
REMOTE GROUND
REMOTE-CONTROL FLY-LEAD

RESET (PART 7)
MC_ON/OFF (PART 7)
ON/OFF (PART 7)
SUPPLY_ON/OFF (PART 7)
EXT ILLUM (PART 8)
TEL MUTE (PART 7)
REM_CTRL (PART 7)

7905 L7805ABV
7903 L7805ABV
7904 BC547
7901 BD438
7902 BC857B
7914 BC847
7913 BC847
7912 BC857B
7911 BC857B
7920 L7805ABV
7906
7908

2907 22u
2903 22u
2905 22u
2904 10u
2906 22u
2908 10u
2919 10u
2913 22n
2914 2u2
2915 1u
2912 100n
2911 100p
2900 100p
2902 1.5KE27
2901 3m3
2906 10K
2907 10K
2908 10K
2909 10K
2910 10K
2911 10K
2912 10K
2913 10K
2914 10K
2915 10K
2916 10K
2917 10K
2918 10K
2919 10K
2920 10K
2921 10K
2922 10K
2923 10K
2924 10K
2925 220R
2926 220R
2927 220R
2928 100K
2929 100K
2930 100K
2931 100K
2932 100K
2933 10K
2934 10K
2935 10K
2936 10K
2937 10K
2938 10K
2939 10K
2940 10K
2941 10K
2942 10K
2943 10K
2944 10K
2945 10K
2946 10K
2947 10K
2948 10K
2949 10K
2950 10K
2951 10K
2952 10K
2953 10K
2954 10K
2955 10K
2956 10K
2957 10K
2958 10K
2959 10K
2960 10K
2961 10K
2962 10K
2963 10K
2964 10K
2965 10K
2966 10K
2967 10K
2968 10K
2969 10K
2970 10K
2971 10K
2972 10K
2973 10K
2974 10K
2975 10K
2976 10K
2977 10K
2978 10K
2979 10K
2980 10K
2981 10K
2982 10K
2983 10K
2984 10K
2985 10K
2986 10K
2987 10K
2988 10K
2989 10K
2990 10K
2991 10K
2992 10K
2993 10K
2994 10K
2995 10K
2996 10K
2997 10K
2998 10K
2999 10K
3000 10K
3001 10K
3002 10K
3003 10K
3004 10K
3005 10K
3006 10K
3007 10K
3008 10K
3009 10K
3010 10K
3011 10K
3012 10K
3013 10K
3014 10K
3015 10K
3016 10K
3017 10K
3018 10K
3019 10K
3020 10K
3021 10K
3022 10K
3023 10K
3024 10K
3025 10K
3026 10K
3027 10K
3028 10K
3029 10K
3030 10K
3031 10K
3032 10K
3033 10K
3034 10K
3035 10K
3036 10K
3037 10K
3038 10K
3039 10K
3040 10K
3041 10K
3042 10K
3043 10K
3044 10K
3045 10K
3046 10K
3047 10K
3048 10K
3049 10K
3050 10K
3051 10K
3052 10K
3053 10K
3054 10K
3055 10K
3056 10K
3057 10K
3058 10K
3059 10K
3060 10K
3061 10K
3062 10K
3063 10K
3064 10K
3065 10K
3066 10K
3067 10K
3068 10K
3069 10K
3070 10K
3071 10K
3072 10K
3073 10K
3074 10K
3075 10K
3076 10K
3077 10K
3078 10K
3079 10K
3080 10K
3081 10K
3082 10K
3083 10K
3084 10K
3085 10K
3086 10K
3087 10K
3088 10K
3089 10K
3090 10K
3091 10K
3092 10K
3093 10K
3094 10K
3095 10K
3096 10K
3097 10K
3098 10K
3099 10K
3100 10K
3101 10K
3102 10K
3103 10K
3104 10K
3105 10K
3106 10K
3107 10K
3108 10K
3109 10K
3110 10K
3111 10K
3112 10K
3113 10K
3114 10K
3115 10K
3116 10K
3117 10K
3118 10K
3119 10K
3120 10K
3121 10K
3122 10K
3123 10K
3124 10K
3125 10K
3126 10K
3127 10K
3128 10K
3129 10K
3130 10K
3131 10K
3132 10K
3133 10K
3134 10K
3135 10K
3136 10K
3137 10K
3138 10K
3139 10K
3140 10K
3141 10K
3142 10K
3143 10K
3144 10K
3145 10K
3146 10K
3147 10K
3148 10K
3149 10K
3150 10K
3151 10K
3152 10K
3153 10K
3154 10K
3155 10K
3156 10K
3157 10K
3158 10K
3159 10K
3160 10K
3161 10K
3162 10K
3163 10K
3164 10K
3165 10K
3166 10K
3167 10K
3168 10K
3169 10K
3170 10K
3171 10K
3172 10K
3173 10K
3174 10K
3175 10K
3176 10K
3177 10K
3178 10K
3179 10K
3180 10K
3181 10K
3182 10K
3183 10K
3184 10K
3185 10K
3186 10K
3187 10K
3188 10K
3189 10K
3190 10K
3191 10K
3192 10K
3193 10K
3194 10K
3195 10K
3196 10K
3197 10K
3198 10K
3199 10K
3200 10K
3201 10K
3202 10K
3203 10K
3204 10K
3205 10K
3206 10K
3207 10K
3208 10K
3209 10K
3210 10K
3211 10K
3212 10K
3213 10K
3214 10K
3215 10K
3216 10K
3217 10K
3218 10K
3219 10K
3220 10K
3221 10K
3222 10K
3223 10K
3224 10K
3225 10K
3226 10K
3227 10K
3228 10K
3229 10K
3230 10K
3231 10K
3232 10K
3233 10K
3234 10K
3235 10K
3236 10K
3237 10K
3238 10K
3239 10K
3240 10K
3241 10K
3242 10K
3243 10K
3244 10K
3245 10K
3246 10K
3247 10K
3248 10K
3249 10K
3250 10K
3251 10K
3252 10K
3253 10K

PCS 77 883

1001	C13
1002	B13
1004	B13
1006	B13
1008	B13
1010	G13
1012	G13
1022	B12
1024	B12
1026	B12
1028	B12
1030	B12
1032	B12
1034	B12
1036	B12
1038	B12
1040	B12
1042	B12
1044	B12
1046	B12
1048	B12
1050	B12
1052	B12
1054	B12
1056	B12
1058	B12
1060	B12
1062	B12
1064	B12
1066	B12
1068	B12
1070	B12
1072	B12
1074	B12
1076	B12
1078	B12
1080	B12
1082	B12
1084	B12
1086	B12
1088	B12
1090	B12
1092	B12
1094	B12
1096	B12
1098	B12
1100	B12
1102	B12
1104	B12
1106	B12
1108	B12
1110	B12
1112	B12
1114	B12
1116	B12
1118	B12
1120	B12
1122	B12
1124	B12
1126	B12
1128	B12
1130	B12
1132	B12
1134	B12
1136	B12
1138	B12
1140	B12
1142	B12
1144	B12
1146	B12
1148	B12
1150	B12
1152	B12
1154	B12
1156	B12
1158	B12
1160	B12
1162	B12
1164	B12
1166	B12
1168	B12
1170	B12
1172	B12
1174	B12
1176	B12
1178	B12
1180	B12
1182	B12
1184	B12
1186	B12
1188	B12
1190	B12
1192	B12
1194	B12
1196	B12
1198	B12
1200	B12
1202	B12
1204	B12
1206	B12
1208	B12
1210	B12
1212	B12
1214	B12
1216	B12
1218	B12
1220	B12
1222	B12
1224	B12
1226	B12
1228	B12
1230	B12
1232	B12
1234	B12
1236	B12
1238	B12
1240	B12
1242	B12
1244	B12
1246	B12
1248	B12
1250	B12
1252	B12
1254	B12
1256	B12
1258	B12
1260	B12
1262	B12
1264	B12
1266	B12
1268	B12
1270	B12
1272	B12
1274	B12
1276	B12
1278	B12
1280	B12
1282	B12
1284	B12
1286	B12
1288	B12
1290	B12
1292	B12
1294	B12
1296	B12
1298	B12
1300	B12
1302	B12
1304	B12
1306	B12
1308	B12
1310	B12
1312	B12
1314	B12
1316	B12
1318	B12
1320	B12
1322	B12
1324	B12
1326	B12
1328	B12
1330	B12
1332	B12
1334	B12
1336	B12
1338	B12
1340	B12
1342	B12
1344	B12
1346	B12
1348	B12
1350	B12
1352	B12
1354	B12
1356	B12
1358	B12
1360	B12
1362	B12
1364	B12
1366	B12
1368	B12
1370	B12
1372	B12
1374	B12
1376	B12
1378	B12
1380	B12
1382	B12
1384	B12
1386	B12
1388	B12
1390	B12
1392	B12
1394	B12
1396	B

Some useful tips on Micro-processor				
Voltage and waveform are measured with A4 & A7 with 14.4V unless otherwise stated.				
(on) = Power on				
(off) = Power off				
Pin No.	Name	I/O	Function description	Voltage/Waveform
1	VSS	I	uP GND	0V
2			High clock oscillator	2V dc, sine wave
3			High clock oscillator	1.7V dc, sine wave
4	RESET	I	uP reset	4.6V
5			Slow clock oscillator	2.5V dc, sine wave
6			Slow clock oscillator	1.9V dc, sine wave
7	TEST			0V
8	RDS_PAUSE			0V
9	D2B_INT	I	D2B interrupt from CDC	
10	BEEP/BLINK	O	Roger Beep/Blink LED when detach is off.	
11	P6_MOTOR/CD_INS	I/O	Insert Switch, to check if deck is loaded	0V (tuner), 5V (Tape/CD loaded)
12	COLOUR	O	Change display colour	0V (orange), 5V (green)
13	SOFAC_MUTE	O	SOFAC IC mute	0V (mute), 5V (demute)
14	PA_MUTE	O	Power amplifier mute	0V (mute), 5V (demute)
15	ON/OFF LOGIC	I	To check existence of A4	5V when A4=14.4V
16	D2B_RESET	O	D2B IC RESET	
17	RDS_CLK	I	RDS clock	
18	MC_ON/OFF	I	To check uP on/off status	0V (on), 5V pulse (during power on/off)
19	IN_LOCK	I		5V (on), 0V(off)
20	RDS_DATA	I/O		
21	P6_TRACK	I	Side A or Side B	0V (SIDE A), 5V(SIDE B)
22	CAS_MSS	I	To detect blank pulse during next/previous track	
23	SDA I2C	I	Serial Data I2C	5V (on), 0V(off)
24	CD_CRST	I	Reset	5V (on), 0V(off)
25	P6_MUTE/CD_CRQ	I	Communication Request	5V (on), 0V(off)
26	SDA	I/O	Serial data	5V (on), 0V(off)
27	SCL	O	Serial clock	5V (on), 0V(off)
28	EEP_SCL		Eeprom serial clock	
29	EEP_SDA		Eeprom serial data	
30	SUPPLY_ON/OFF	O		5V (off), 0V (on)
31	HOT_INFO	I		5V when Display shows "TOO HOT"
32	REM_CTRL	I		For remote control EA2001
33	IGN/PA_DDD		To check existence of A7	5V when A7=14.4V
34	KEY_4			
35	KEY_3			
36	KEY_2			
37	KEY_1			
38	VASS			0V
39	+4		Permanent supply	5V
40	VDD	I	uP supply	5V
41	TEL_MUTE	I	TEL_MUTE (Phone "LO")	5V (Set muted, display shows "TEL CALL"). 0V (set play as normal)
		I	TEL_MUTE (Phone "HI")	5V (set play as normal). 0V (Set muted, display shows "TEL CALL").
42-76		O	LCD driver output	
77	VLC	I	GND	0V
78-80	NC			

ADDITIONAL FUNCTION CHECK:

Item	Input	Output
External illumination +	Set off Inject +12V at pin A6	Power pilot light turns ON.
Auto Antenna	Connect a resistor of 25Ω from A5 to GND. Switch on set.	Voltage drop between pin A7 & A5 < 1V.
Line-out	Tuner set to FM mode, 97MHz Inject 97MHz, 22.5kHz dev. E'=1mV, 1kHz mod. Set volume setting at 1Vrms at speaker output.	Measure at Line-out Flyleads a 1kHz AF signal of 200mVrms.

POWER IGNITION CHECK :

Steps	Permanent (A4)	Ignition (A7)	Action	Observation
1	ON	ON	Turn set ON with power key.	Set is turn on.
2	ON	OFF	Switch OFF ignition	Set switches off.
3	ON	ON	Switch ON ignition.	Set will be on.

TUNER CHECK:

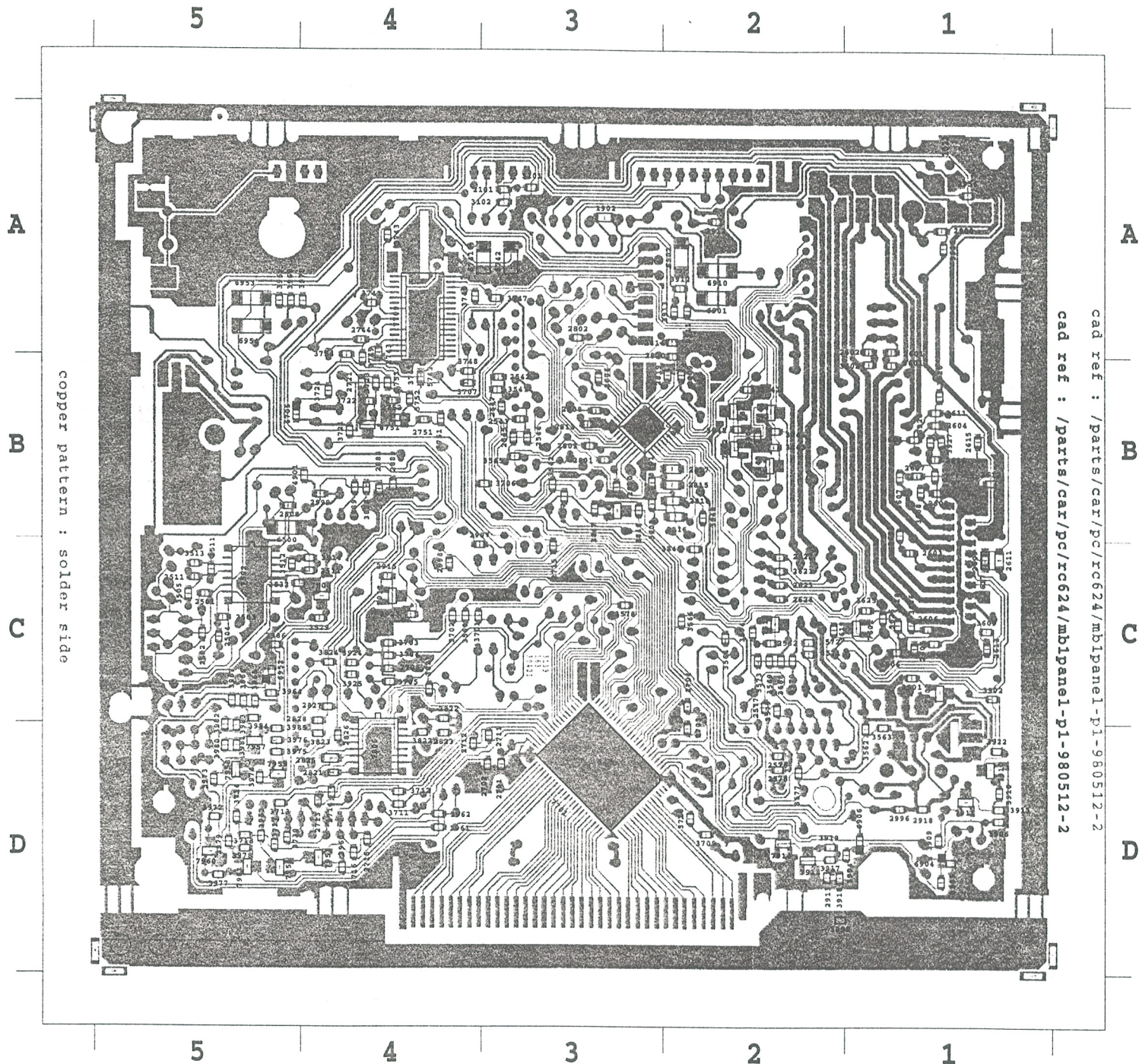
IC96 7SV/9SV module is a Non repairable module, complete spare parts as an module is readily available. For general check, please refer to the manual " General Check & Alignment procedures for Car Systems" 4822 725 25456. Use a matching circuit (artificial aerials) with Zi = 75ohm.

CHECK	TUNE IN	OUTPUT
α - 3 dB	FM 93MHz, 1mV, Dev=22.5kHz, f mod. = 1kHz FM 93MHz, 8uV, Dev=22.5kHz, f mod. = 1kHz	Conn. Block B3, B5 = 0dB (reference level) Conn. Block B3, B5 = -3dB
SDS 10dB Crosstalk	FM 93MHz, 1mV, Dev=22.5kHz, f mod. = 1kHz FM 93MHz, 150uV, Dev=22.5kHz, f mod. = 1kHz (L)	Conn. Block B3, B5 = 0dB (reference level) Conn. Block B3 = -10dB
Stereo Channel separation	FM 93MHz, 1mV, Dev=22.5kHz, f mod. = 1kHz FM 93MHz, 1mV, Dev=22.5kHz, f mod. = 1kHz (L)	Conn. Block B3, B5 = 0dB (reference level) Conn. Block B3 ≤ -21dB
26dB SNR	FM 93MHz, 4.5uV, Dev=22.5kHz, f mod. = 1kHz FM 93MHz, 4.5uV, Dev=22.5kHz, unmodulated	Conn. Block B3, B5 = 0dB (reference level) Conn. Block B3, B5 ≤ -26dB
FM Demodulated level	FM 93MHz, 1mV, Dev=22.5kHz, f mod. = 1kHz	Pin 13 of Tuner module = 280mV (AC) ± 3dB Pin 7 of IC96 = 215mV (AC) ± 2dB
FM Search Sensitivity	FM 93MHz, unmodulated	DX : 10uV < E < 20uV LO : 190uV < E < 290uV
AM Demodulated level	AM 1053kHz, 1mV, m=30%, f mod. = 1kHz	Pin 13 of Tuner module = 280mV (AC) ± 2dB
26dB SNR	MW 1053kHz, 30uV, m=30%, f mod. = 1kHz MW 1053kHz, 30uV, unmodulated	Conn. Block B3, B5 = 0dB (reference level) Conn. Block B3, B5 ≤ -26dB
26dB SNR	LW 207kHz, 38uV, m=30%, f mod. = 1kHz LW 207kHz, 38uV, unmodulated	Conn. Block B3, B5 = 0dB (reference level) Conn. Block B3, B5 ≤ -26dB
AM Search Sensitivity	AM 1053kHz, unmodulated	DX : E = 14uV LO : E = 70uV

CLOCK ALIGNMENT :

Set T722 (EEPROM-SCL) TO GND and turn the set on to do clock alignment.

Signal	Test point	Frequency	Aligned with
CLK	(T108) Pin 20 of main uP	1024Hz	2705
GND	(T106) Power supply Gnd		



3999 D 2	2817 B 2	3626 C 1	3924 C 4	7912 C 4
----	2818 B 2	3701 C 4	3925 C 4	7913 D 2
1020 A 2	2819 B 2	3702 C 4	3926 B 1	7914 D 2
1022 A 1	2820 B 2	3703 C 4	3927 B 1	7953 D 4
1902 A 3	2821 D 4	3704 C 4	3928 B 1	7954 D 5
2101 A 3	2822 C 4	3705 C 4	3960 D 4	7957 D 5
2501 C 5	2823 D 4	3706 B 3	3961 D 4	7958 D 5
2502 C 5	2825 D 4	3707 B 4	3962 D 4	7959 D 5
2503 C 5	2826 D 4	3709 D 2	3963 D 5	7960 D 5
2504 C 5	2827 C 4	3710 D 2	3964 C 5	7961 D 5
2508 B 5	2828 C 4	3711 D 4	3965 C 5	
2511 C 5	2830 B 3	3712 D 4	3966 C 5	
2512 C 4	2888 B 4	3713 D 5	3967 C 5	
2542 B 3	2889 B 4	3714 D 5	3968 A 5	
2543 B 3	2900 A 1	3715 D 4	3969 A 5	
2544 B 3	2911 A 2	3716 D 4	3970 A 4	
2545 B 3	2912 A 2	3717 D 5	3972 D 5	
2547 B 3	2913 D 2	3718 D 5	3973 D 5	
2562 C 2	2915 C 4	3721 B 4	3974 D 5	
2576 D 2	2918 D 1	3722 B 4	3975 D 5	
2577 C 2	2956 A 1	3723 B 4	3976 D 5	
2578 D 2	2996 D 1	3724 B 4	3977 D 5	
2601 A 1	2997 C 4	3730 D 5	3978 D 5	
2602 A 1	2998 C 4	3741 A 4	3979 D 5	
2603 C 1	2999 B 4	3742 B 4	3980 D 5	
2604 B 1	3101 A 3	3743 A 4	3981 D 5	
2605 C 1	3102 A 3	3746 A 4	3982 D 5	
2606 C 1	3505 C 5	3747 A 3	3983 D 5	
2607 B 1	3511 C 5	3748 B 4	3984 C 5	
2608 B 1	3512 C 5	3749 B 4	3985 D 5	
2609 C 1	3513 C 5	3751 B 4	3986 C 5	
2611 C 1	3514 C 4	3752 B 4	4901 B 4	
2612 B 1	3529 C 4	3753 B 4	4904 B 2	
2613 C 1	3532 C 5	3754 B 4	4906 C 1	
2615 B 1	3541 B 3	3801 B 3	4907 B 3	
2616 B 1	3542 B 3	3802 B 3	5742 B 4	
2617 C 1	3545 B 3	3821 C 4	6500 B 5	
2621 C 2	3560 C 4	3822 D 4	6705 B 5	
2622 C 2	3562 D 1	3823 D 4	6741 A 3	
2623 C 2	3563 D 1	3824 C 4	6742 A 3	
2624 C 2	3564 C 2	3841 B 2	6751 B 4	
2701 D 3	3566 C 2	3842 B 2	6901 A 2	
2702 D 3	3568 C 2	3843 B 2	6902 A 2	
2703 D 2	3569 C 2	3844 B 2	6904 D 1	
2704 C 2	3570 C 2	3845 C 2	6906 D 1	
2706 C 4	3571 C 2	3846 B 3	6910 A 2	
2711 D 3	3572 C 2	3847 B 3	6952 C 2	
2712 D 4	3573 C 2	3848 B 2	6953 A 5	
2713 D 4	3574 C 2	3888 B 4	6954 A 5	
2714 D 4	3577 D 2	3889 B 4	7502 C 5	
2715 C 3	3578 C 3	3901 C 1	7506 C 4	
2721 B 4	3579 C 2	3902 C 1	7512 C 2	
2743 A 4	3601 B 1	3904 D 1	7601 C 1	
2744 A 4	3602 B 1	3905 D 1	7701 D 3	
2751 B 4	3603 B 1	3906 D 1	7703 B 4	
2752 B 4	3604 B 1	3909 D 1	7709 A 4	
2801 B 3	3605 C 1	3910 D 1	7801 B 3	
2802 A 3	3606 C 1	3911 D 1	7806 D 4	
2803 B 3	3607 B 1	3912 A 2	7841 B 2	
2804 B 3	3608 B 1	3913 A 2	7842 B 2	
2808 B 3	3609 C 1	3917 D 2	7843 B 2	
2809 B 2	3611 B 1	3918 D 2	7844 B 2	
2813 B 3	3612 B 1	3919 D 2	7845 B 3	
2814 A 2	3618 C 1	3921 A 1	7902 C 1	
2815 B 2	3619 C 2	3922 D 1	7910 D 1	
2816 B 2	3625 C 1	3923 C 4	7911 D 1	

D

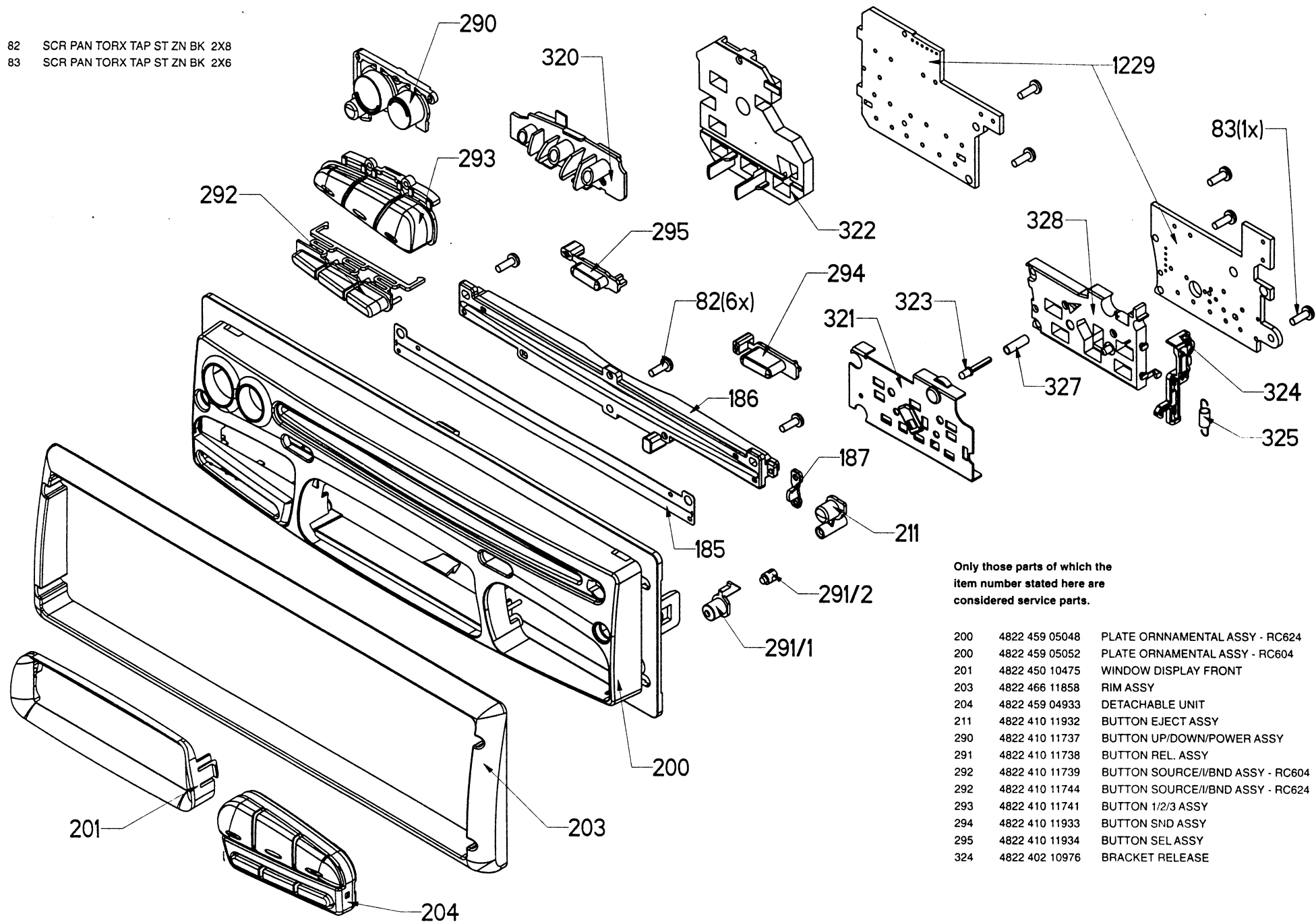
1

9-3

1001	A	1	9501	C	5	9941	C	3
1002	A	1	9502	C	2	9942	C	3
1003	A	1	9503	D	2	9943	B	4
1004	A	1	9506	C	2	9944	B	4
1005	A	1	9507	C	2	9945	C	4
1006	A	1	9508	C	2	9946	A	5
1007	A	1	9509	C	3	9947	B	5
1008	A	1	9512	C	3	9948	D	2
1009	A	1	9700	C	3	9949	C	2
1010	A	1	9701	C	3	9950	C	1
1011	A	2	9702	B	4	9951	C	3
1012	A	1	9703	B	4	9952	C	3
1013	A	2	9704	B	4	9953	D	4
1014	A	2	9800	B	3	9954	D	4
1015	A	2	9801	B	4	9955	D	4
1016	A	2	9802	B	4	9956	C	3
1017	A	2	9803	B	4	9957	C	3
1018	A	2	9804	A	4	9958	B	2
1019	A	2	9805	A	2	9959	B	3
1021	A	2	9807	B	2	9960	B	3
1101	A	5	9808	A	1	9961	A	3
1501	C	5	9809	C	3	9962	B	3
1502	C	5	9810	C	2	9963	B	3
1503	D	2	9811	C	2	9964	B	4
1702	D	4	9812	C	2	9965	C	4
1704	D	2	9813	C	2	9967	B	4
1710	A	3	9814	C	2	9968	C	4
1801	B	4	9900	B	1	9969	C	3
1951	D	5	9901	B	1	9970	B	3
1952	D	5	9902	B	1	9971	B	4
1953	D	5	9903	B	1	9972	B	1
1954	D	5	9904	B	1	9973	B	1
1955	D	5	9905	B	1	9974	B	1
1956	D	5	9906	C	1	9975	B	2
2705	C	2	9907	C	2	9977	C	3
2901	B	1	9908	C	2	9979	D	4
3506	C	5	9909	C	1	9980	B	4
3520	B	5	9910	D	1	9981	A	2
3530	C	4	9911	A	2	9982	A	3
3531	C	4	9912	C	1	9984	B	3
3544	B	3	9913	C	1	9985	B	3
3561	D	2	9914	A	1	9986	D	1
3565	D	2	9915	A	1	9987	D	2
3576	D	2	9916	A	2	9988	D	2
3621	C	1	9917	C	2	9989	D	3
3622	C	1	9918	C	3	9990	D	4
3623	C	2	9919	C	3	9991	D	2
3624	C	1	9920	D	5	9992	C	5
3719	B	3	9921	A	3	9993	D	5
3803	B	3	9922	C	4	9994	D	1
3908	D	1	9923	B	5	9995	A	2
3914	A	3	9924	A	3	9996	A	3
3933	D	1	9925	A	3	9997	A	3
3942	A	3	9926	A	3	9998	D	4
5701	C	3	9927	C	2	9999	D	1
5900	A	1	9928	D	4	----		
6900	B	2	9929	A	4			
7508	A	3	9930	A	3			
7600	C	1	9931	A	2			
7702	C	4	9932	A	2			
7807	C	5	9933	A	2			
7901	C	1	9934	B	4			
7903	D	1	9935	B	5			
7905	B	5	9936	B	5			
7920	D	1	9937	B	5			
9500	C							

RC624/604 FRONT EXPLODED VIEW

- 82 SCR PAN TORX TAP ST ZN BK 2X8
- 83 SCR PAN TORX TAP ST ZN BK 2X6

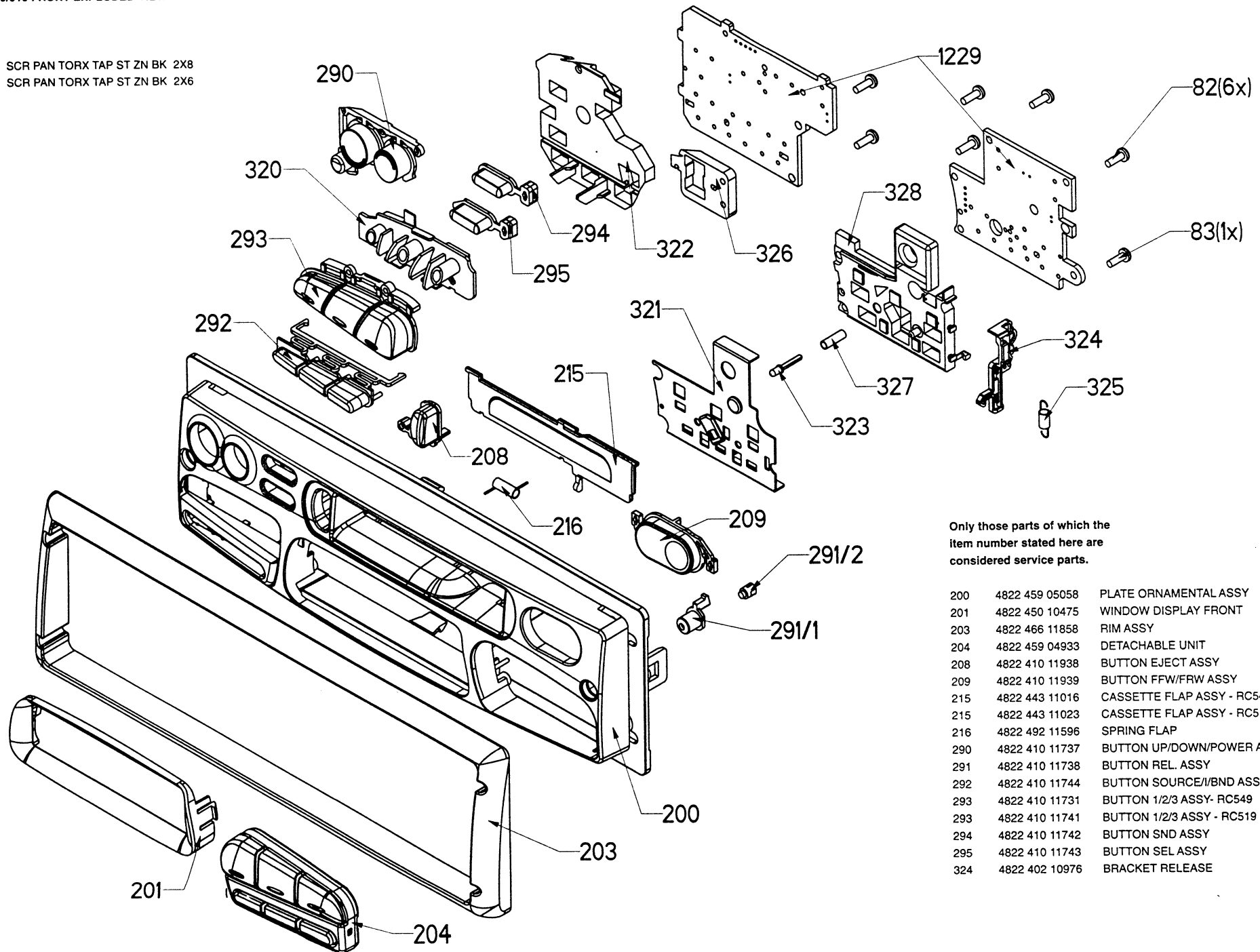


Only those parts of which the item number stated here are considered service parts.

200	4822 459 05048	PLATE ORNAMENTAL ASSY - RC624
200	4822 459 05052	PLATE ORNAMENTAL ASSY - RC604
201	4822 450 10475	WINDOW DISPLAY FRONT
203	4822 466 11858	RIM ASSY
204	4822 459 04933	DETACHABLE UNIT
211	4822 410 11932	BUTTON EJECT ASSY
290	4822 410 11737	BUTTON UP/DOWN/POWER ASSY
291	4822 410 11738	BUTTON REL. ASSY
292	4822 410 11739	BUTTON SOURCE//BND ASSY - RC604
292	4822 410 11744	BUTTON SOURCE//BND ASSY - RC624
293	4822 410 11741	BUTTON 1/2/3 ASSY
294	4822 410 11933	BUTTON SND ASSY
295	4822 410 11934	BUTTON SEL ASSY
324	4822 402 10976	BRACKET RELEASE

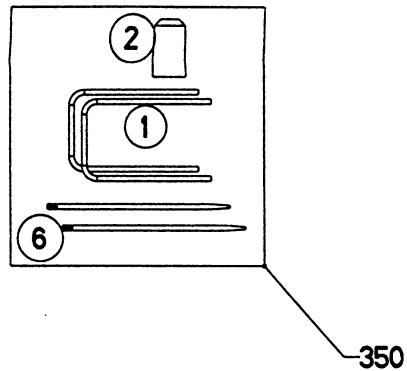
RC549/519 FRONT EXPLODED VIEW

- 82 SCR PAN TORX TAP ST ZN BK 2X8
- 83 SCR PAN TORX TAP ST ZN BK 2X6



Only those parts of which the item number stated here are considered service parts.

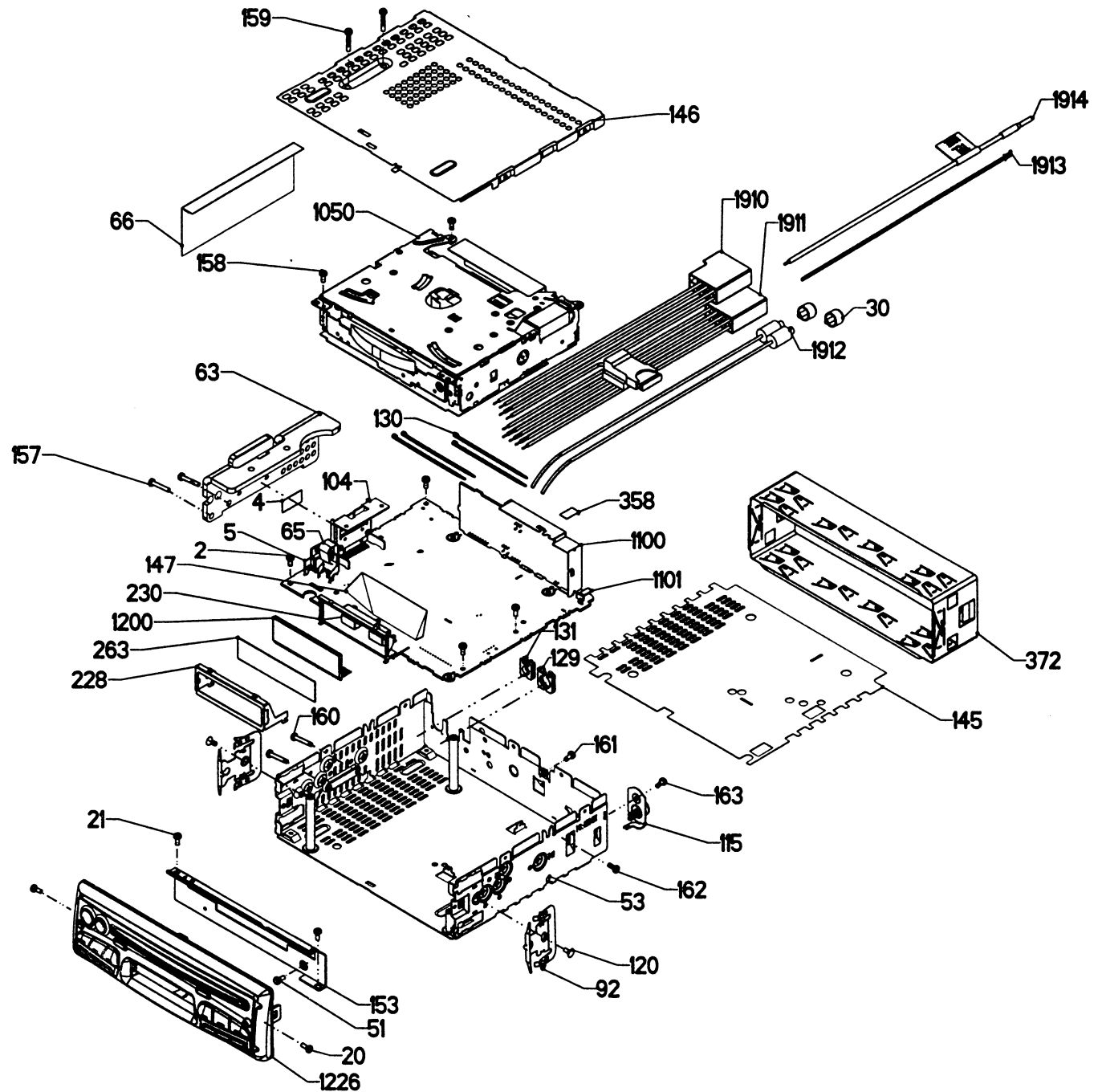
200	4822 459 05058	PLATE ORNAMENTAL ASSY
201	4822 450 10475	WINDOW DISPLAY FRONT
203	4822 466 11858	RIM ASSY
204	4822 459 04933	DETACHABLE UNIT
208	4822 410 11938	BUTTON EJECT ASSY
209	4822 410 11939	BUTTON FFW/FRW ASSY
215	4822 443 11016	CASSETTE FLAP ASSY - RC549
215	4822 443 11023	CASSETTE FLAP ASSY - RC519
216	4822 492 11596	SPRING FLAP
290	4822 410 11737	BUTTON UP/DOWN/POWER ASSY
291	4822 410 11738	BUTTON REL ASSY
292	4822 410 11744	BUTTON SOURCE/1/BND ASSY
293	4822 410 11731	BUTTON 1/2/3 ASSY- RC549
293	4822 410 11741	BUTTON 1/2/3 ASSY - RC519
294	4822 410 11742	BUTTON SND ASSY
295	4822 410 11743	BUTTON SEL ASSY
324	4822 402 10976	BRACKET RELEASE



Only those parts of which the item number stated here are considered service parts.

92	4822 492 71046	SPRING MOUNTING
115	4822 265 10717	CONNECTOR AERIAL ASSY
350/1	4822 404 20437	BRACKET MOUNTING
350/2	4822 532 11092	BUFFER MOUNTING
372	4822 423 90186	SLEEVE
1227	4822 691 10723	CDMM2 1.1/1 ASSY
	4822 263 21164	ADAPTOR AERIAL (ISO-DIN)-17
	4822 256 10293	HOLDER AERIAL ADAPTOR-17
	4822 418 10337	BOX DETACHABLE UNIT
	4822 736 16272	DIRECTION FOR USE

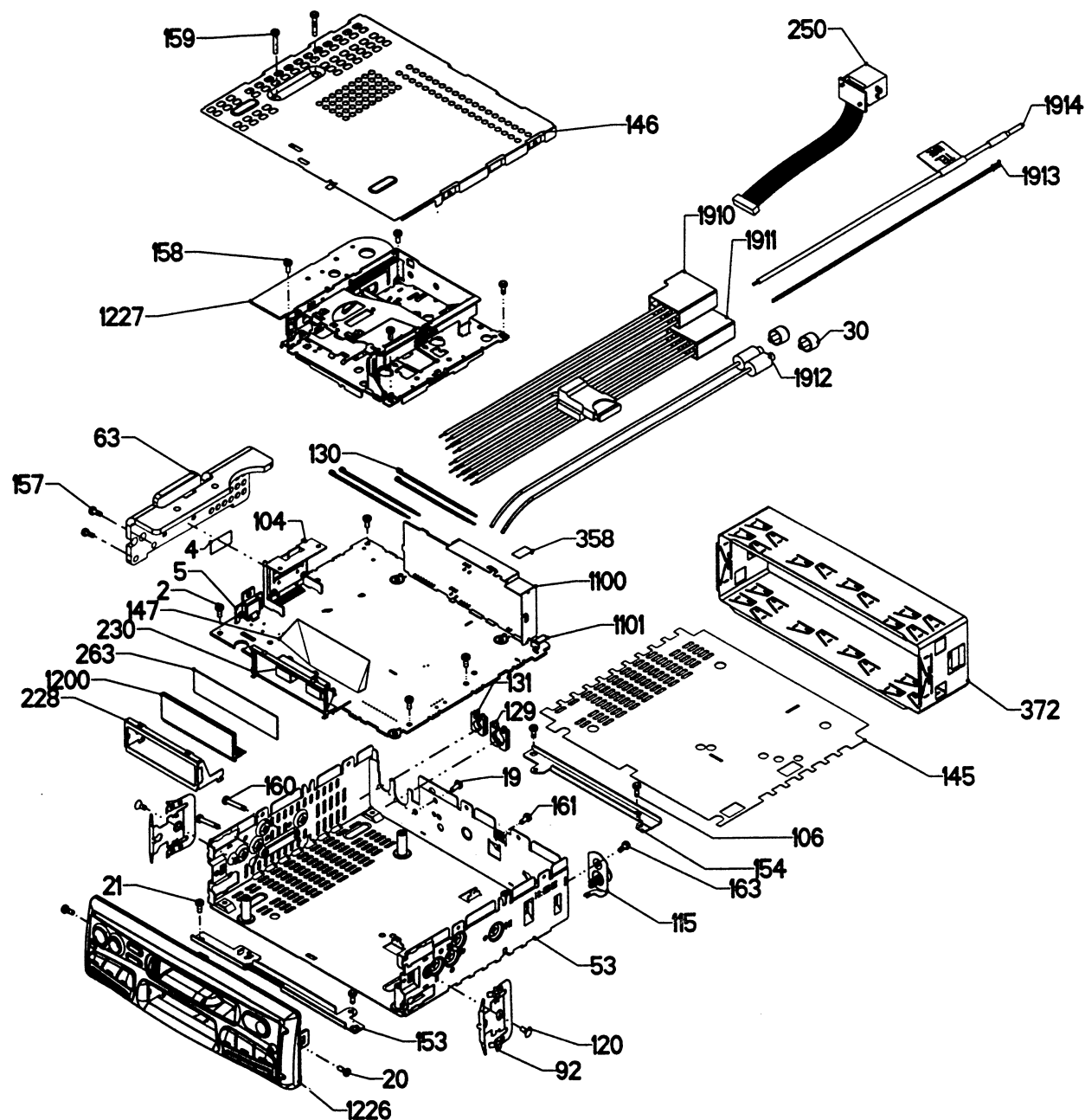
2	SCR PAN TAP ST ZN GN	M2.5X6
20	SCR PAN TAP ST ZN YE	M2.5X6
21	SCR PAN TAP ST ZN YE	M2.5X6
120	SCR CSK TORX TAP ST ZN	M3X6
157	SCR PAN TAP ST ZN YE	M2.5X12
158	SCR PAN TAP ST ZN YE	M2.5X6
159	SCR PAN TAP ST ZN YE	M2.5X12
160	SCR PAN TAP ST ZN YE	M2.5X16
161	SCR PAN TAP ST ZN BK	M2.5*3
162	SCR PAN TAP ST ZN YE	M2.5X6
163	SCR PAN TAP ST ZN YE	M2.5X6



A diagram of a chair with three numbered parts: 1 (the seat), 2 (the backrest), and 6 (the legs).

92	4822 492 71046	SPRING MOUNTING
115	4822 265 10717	CONNECTOR AERIAL ASSY
250	4822 265 11228	CONNECTOR ASSY CDCC - RC549
350/1	4822 404 20437	BRACKET MOUNTING
350/2	4822 532 11092	BUFFER MOUNTING
372	4822 423 90186	SLEEVE
1227	4822 691 10726	TAPDECK SCA-R3.3
	4822 418 10337	BOX DETACHABLE UNIT
	4822 736 16283	DIRECTION FOR USE

2	SCR PAN TAP ST ZN GN	M2.5X6
19	SCR PAN TAP ST ZN YE	M2.5X6
20	SCR PAN TAP ST ZN YE	M2.5X6
21	SCR PAN TAP ST ZN YE	M2.5X6
106	SCR PAN TAP ST ZN YE	M2.5X6
120	SCR CSK TORX TAP ST ZN	M3X6
157	SCR PAN TAP ST ZN YE	M2.5X12
158	SCR PAN TAP ST ZN YE	M2.5X6
159	SCR PAN TAP ST ZN YE	M2.5X12
160	SCR PAN TAP ST ZN YE	M2.5X16
161	SCR PAN TAP ST ZN BK	M2.5"3
163	SCR PAN TAP ST ZN YE	M2.5X6



RC549/519 PARTSLIST
MAIN PCB : MISCELLANEOUS

1100	4822 210 10746	TUNER IC96 7SV
1200	4822 135 00168	LCD NEGATIVE PLL98
1501	4822 267 40818	TAPEDECK PLAYHEAD CONNECTOR
1702	4822 265 41508	10PIN CONNECTOR
1703	4822 242 72066	FILTER, CERAMIC CST8,00MT
1704	4822 242 70938	CRYSTAL (32,768KHZ)
1709	4822 242 81002	FILTER, CERAMIC CST6,00MGW - RC549
1806	4822 242 72195	CRYSTAL QUARZ 4,332 MHZ
1910	4822 320 12239	CABLE FLYLEAD ASSY POWER
1911	4822 320 12241	CABLE FLYLEAD ASSY SPEAKER
1912	4822 320 12389	CABLE OUT 4 CHANNEL - RC549
1913	4822 320 12277	CABLE LE MOUSE
1914	4822 320 12278	CABLE TELEPHONE MUTE
1951	4822 134 10111	T1 5V 115MA ORANGE
1952	4822 134 10111	T1 5V 115MA ORANGE
1954	4822 134 10109	T1 5V 115MA GREEN
1955	4822 134 10109	T1 5V 115MA GREEN

MAIN PCB : ELECTROLYTIC CAPACITOR

2505	4822 124 80453	100UF20% 10V
2506	4822 124 41017	10UF 16V
2507	4822 124 80453	100UF20% 10V
2509	4822 124 41017	10UF 16V
2510	4822 124 41017	10UF 16V
2541	4822 124 23504	2.2UF20% 50V
2610	4822 124 11551	10UF 20% 50V
2705	5322 125 50295	6P0-50PF - RC549
2805	4822 124 23504	2.2UF20% 50V - RC549
2806	4822 124 23504	2.2UF20% 50V - RC549
2807	4822 124 23504	2.2UF20% 50V - RC549
2810	4822 124 41017	10UF 16V
2811	4822 124 23504	2.2UF20% 50V
2812	4822 124 23504	2.2UF20% 50V
2824	4822 124 23504	2.2UF20% 50V
2829	4822 124 23504	2.2UF20% 50V
2841	4822 124 23504	2.2UF20% 50V - RC549
2842	4822 124 23504	2.2UF20% 50V - RC549
2843	4822 124 23504	2.2UF20% 50V - RC549
2844	4822 124 23504	2.2UF20% 50V - RC549
2901	4822 124 12236	3300uF 20% 16V
2903	4822 124 23279	22UF20% 16V
2904	4822 124 41017	10UF 16V
2905	4822 124 11551	10UF 20% 50V
2907	4822 124 23279	22UF20% 16V
2914	4822 124 23504	2.2UF20% 50V
2954	4822 124 22646	47UF20% 16V
2955	4822 124 23279	22UF20% 16V

MAIN PCB : PTC RESISTORS

3620	4822 116 40254	330R PTC
3744	4822 116 10063	8.2R 25% 30V PTC - RC549
3745	4822 116 10063	8.2R 25% 30V PTC - RC549
3941	4822 116 40267	3R3 25% 20V PTC
3942	4822 252 11299	RESETTABLE RUE090

MAIN PCB : COIL, DIODES

5701	4822 157 53473	1000UH 10% 4X9,8
5742	4822 157 71206	FILTER BLM21A601SPT
5900	4822 157 70935	COIL ASSY 97UH 10A
6500	4822 130 10655	1SR154-400
6705	4822 130 83757	BAS216
6741	4822 130 10657	PTZ5.6A - RC549
6742	4822 130 10657	PTZ5.6A - RC549
6751	4822 130 10185	UDZ5.6B
6900	4822 130 81624	1.5KE27
6901	4822 130 10655	1SR154-400
6902	4822 130 10655	1SR154-400
6904	4822 130 10185	UDZ5.6B
6906	4822 130 83757	BAS216
6910	4822 130 10655	1SR154-400
6952	4822 130 10658	UDZ11B
6953	4822 130 10655	1SR154-400
6954	4822 130 10655	1SR154-400

MAIN PCB : TRANSISTORS / IC

7502	4822 209 15349	TEA0676T/V1
7506	4822 130 60511	BC847B
7508	4822 209 83159	LA2000
7600	4822 209 16782	TDA7384A
7601	4822 130 60511	BC847B
7701	4822 209 16783	TMP87CM21F-50930
7703	4822 130 60511	BC847B
7709	4822 209 32743	MSM6307GS - RC549
7801	4822 209 12723	TDA7342
7806	4822 209 16164	TDA7479D
7807	4822 209 83159	LA2000
7841	4822 130 63747	DTC314TK - RC549
7842	4822 130 63747	DTC314TK - RC549
7843	4822 130 63747	DTC314TK - RC549
7844	4822 130 63747	DTC314TK - RC549
7845	5322 130 60508	BC857B - RC549
7901	4822 130 40995	BD438
7902	5322 130 60508	BC857B
7903	4822 209 16784	L7885CV
7904	4822 130 40959	BC547B
7905	4822 209 32866	L7805ABV - RC549
7905	4822 209 90567	L7800ABV - RC519
7910	4822 130 60511	BC847B
7911	5322 130 60508	BC857B
7912	5322 130 60508	BC857B
7913	4822 130 60511	BC847B
7914	4822 130 60511	BC847B
7953	5322 130 60508	BC857B
7954	5322 130 60508	BC857B
7956	4822 130 40959	BC547B
7957	4822 130 42132	BC807
7958	4822 130 42615	BC817-40
7959	5322 130 60508	BC857B
7960	4822 130 42615	BC817-40
7961	4822 130 60511	BC847B

NOTE : "Service code for standard components are not listed here, please refer to Components catalogue from Philips Consumer Service."

FRONT PCB

1774	4822 276 13454	TACT SWITCH 50MA 12V
1775	4822 276 13454	TACT SWITCH 50MA 12V
1776	4822 276 13454	TACT SWITCH 50MA 12V
1777	4822 276 13454	TACT SWITCH 50MA 12V
1778	4822 276 13454	TACT SWITCH 50MA 12V
1779	4822 276 13454	TACT SWITCH 50MA 12V
1780	4822 276 12889	SWITCH IN/OUT
1781	4822 276 13454	TACT SWITCH 50MA 12V
1782	4822 276 13454	TACT SWITCH 50MA 12V
1785	4822 276 13454	TACT SWITCH 50MA 12V
1786	4822 276 13454	TACT SWITCH 50MA 12V
1787	4822 276 13454	TACT SWITCH 50MA 12V
1788	4822 276 13454	TACT SWITCH 50MA 12V
1789	4822 276 13454	TACT SWITCH 50MA 12V
1790	4822 276 13454	TACT SWITCH 50MA 12V
1791	4822 276 13454	TACT SWITCH 50MA 12V
1792	4822 276 13454	TACT SWITCH 50MA 12V
1793	4822 276 13454	TACT SWITCH 50MA 12V
1794	4822 276 13454	TACT SWITCH 50MA 12V
1795	4822 276 13454	TACT SWITCH 50MA 12V
1796	4822 276 13454	TACT SWITCH 50MA 12V
1971	4822 134 10004	T1 5V 115MA
1972	4822 134 10004	T1 5V 115MA
6973	4822 130 83558	LED YELLOW
6974	4822 130 83558	LED YELLOW
6975	4822 130 83558	LED YELLOW
6980	4822 130 11164	LED-34HD
6981	4822 130 83558	LED YELLOW

NOTE : "Service code for standard components are not listed here, please refer to Components catalogue from Philips Consumer Service."

RC624/604 PARTSLIST**MAIN PCB : MISCELLANEOUS**

1100	4822 210 10746	TUNER IC96 7SV
1200	4822 135 00168	LCD NEGATIVE PLL98
1503	4822 265 10808	TAPEDECK PLAYHEAD CONNECTOR
1702	4822 265 41508	10PIN CONNECTOR
1703	4822 242 72066	FILTER, CERAMIC CST8,00MT
1704	4822 242 70938	CRYSTAL (32.768KHZ)
1806	4822 242 72195	QUARZ 4,332 MHZ AT51 - RC624
1910	4822 320 12239	CABLE FLYLEAD ASSY POWER
1911	4822 320 12241	CABLE FLYLEAD ASSY SPEAKER
1912	4822 320 12238	CABLE FLYLEAD ASSY LINE-OUT
1913	4822 320 12277	CABLE LE MOUSE
1914	4822 320 12278	CABLE TELEPHONE MUTE
1951	4822 134 10111	T1 5V 115MA ORANGE
1952	4822 134 10111	T1 5V 115MA ORANGE
1954	4822 134 10109	T1 5V 115MA GREEN
1955	4822 134 10109	T1 5V 115MA GREEN

MAIN PCB : ELECTROLYTIC CAPACITOR

2610	4822 124 11551	10UF 20% 50V
2705	5322 125 50295	6P0-50PF
2810	4822 124 41017	10UF 16V
2811	4822 124 23504	2.2UF20% 50V
2812	4822 124 23504	2.2UF20% 50V
2824	4822 124 23504	2.2UF20% 50V - RC624
2829	4822 124 23504	2.2UF20% 50V - RC624
2841	4822 124 23504	2.2UF20% 50V
2842	4822 124 23504	2.2UF20% 50V
2901	4822 124 12236	3300uF 20% 16V
2903	4822 124 23279	22UF20% 16V
2904	4822 124 41017	10UF 16V
2905	4822 124 11551	10UF 20% 50V
2907	4822 124 23279	22UF20% 16V
2914	4822 124 23504	2.2UF20% 50V
2919	4822 124 41017	10UF 16V
2954	4822 124 22646	47UF20% 16V
2955	4822 124 23279	22UF20% 16V

MAIN PCB : PTC RESISTORS

3620	4822 116 40254	330R PTC
3941	4822 116 40267	3R3 25% 20V
3942	4822 252 11299	RESETTABLE RUE090

MAIN PCB : COIL, DIODES

5701	4822 157 53473	COIL 1000UH 10% 4X9,8
5900	4822 157 70935	COIL ASSY 97UH 10A
6705	4822 130 83757	BAS216
6751	4822 130 10185	UDZ5.6B
6900	4822 130 81624	1.5KE27
6901	4822 130 10655	1SR154-400
6902	4822 130 10655	1SR154-400
6904	4822 130 10185	UDZ5.6B
6906	4822 130 83757	BAS216
6910	4822 130 10655	1SR154-400
6952	4822 130 10658	UDZ11B
6953	4822 130 10655	1SR154-400
6954	4822 130 10655	1SR154-400

MAIN PCB : TRANSISTORS / IC

7600	4822 209 16782	TDA7384A
7601	4822 130 60511	BC847B
7701	4822 209 16756	TMP87CM21F
7703	4822 130 60511	BC847B
7801	4822 209 12723	TDA7342
7806	4822 209 16164	TDA7479D - RC624
7807	4822 209 83159	LA2000 - RC624
7841	4822 130 63747	DTC314TK
7842	4822 130 63747	DTC314TK
7845	5322 130 60508	BC857B
7901	4822 130 40995	BD438
7902	5322 130 60508	BC857B
7903	4822 209 16784	L7885CV
7904	4822 130 40959	BC547B
7905	4822 209 90567	L7800ABV
7910	4822 130 60511	BC847B
7911	5322 130 60508	BC857B
7912	5322 130 60508	BC857B
7913	4822 130 60511	BC847B
7914	4822 130 60511	BC847B
7920	4822 209 90567	L7800ABV
7953	5322 130 60508	BC857B
7954	5322 130 60508	BC857B
7956	4822 130 40959	BC547B
7957	4822 130 42132	BC807
7958	4822 130 42615	BC817-40
7959	5322 130 60508	BC857B
7960	4822 130 42615	BC817-40
7961	4822 130 60511	BC847B

FRONT PCB

1774	4822 276 13454	TACT SWITCH 50MA 12V
1775	4822 276 13454	TACT SWITCH 50MA 12V
1776	4822 276 13454	TACT SWITCH 50MA 12V
1777	4822 276 13454	TACT SWITCH 50MA 12V
1778	4822 276 13454	TACT SWITCH 50MA 12V
1779	4822 276 13454	TACT SWITCH 50MA 12V
1780	4822 276 12889	SWITCH IN/OUT
1781	4822 276 13454	TACT SWITCH 50MA 12V
1782	4822 276 13454	TACT SWITCH 50MA 12V
1785	4822 276 13454	TACT SWITCH 50MA 12V
1786	4822 276 13454	TACT SWITCH 50MA 12V
1787	4822 276 13454	TACT SWITCH 50MA 12V
1788	4822 276 13454	TACT SWITCH 50MA 12V
1791	4822 276 13454	TACT SWITCH 50MA 12V
1792	4822 276 13454	TACT SWITCH 50MA 12V
1793	4822 276 13454	TACT SWITCH 50MA 12V
1794	4822 276 13454	TACT SWITCH 50MA 12V
1795	4822 276 13454	TACT SWITCH 50MA 12V
1796	4822 276 13454	TACT SWITCH 50MA 12V
1971	4822 134 10004	T1 5V 115MA
1972	4822 134 10004	T1 5V 115MA
6973	4822 130 83558	LED YELLOW
6975	4822 130 83558	LED YELLOW
6976	4822 130 83558	LED YELLOW
6980	4822 130 11164	LED-34HD

NOTE : "Service code for standard components are not listed here, please refer to Components catalogue from Philips Consumer Service."

NOTE : "Service code for standard components are not listed here, please refer to Components catalogue from Philips Consumer Service."